Vol. XXXVII DECEMBER, 1925 No. 4

THE WILSON BULLETIN

A Magazine of Field Ornithology

Published by the

WILSON ORNITHOLOGICAL CLUB

at

SIOUX CITY, IOWA

Entered as Second-class Mail Matter, July 13, 1916, at the Postoffice at Sioux City, Iowa, under Act of March 3, 1879.

CONTENTS

Frontispiece	By George Miksch Sutton	
Notes on the Nesting of the Goshawk in Potter County, Pennsylvania	By George Miksch Sutton	193-199
Observations on Shore Birds in Central Oklahoma in 1924	By Margaret Morse Nice	199-203
The Whip-poor-will: Its Prospects of Survival in Southern Iowa	By E. D. Nauman	203-206
Notes on the Shore Birds of Central Iowa	By W. M. Rosen	206-208
Summer Birds at Huron Mountain, Michigan	By Bayard H. Christy	208-216
Editorial		217-218
General Notes		219-227
Bird Banding News		228-235
Banding Ducks at Scobey Lake, Missouri	By T. E. Musselman	228-232
Notes Here and There		235-244
Conservation		244-247
Necrology		248
Index		249-256

THE WILSON BULLETIN

Published quarterly, in March, June, September, and December, as the official organ of the Wilson Ornithological Club, at Sioux City, Iowa.

The current issue of the Wilson Bulletin is printed by the Verstegen Printing Company, Sioux City, Iowa.

The Wilson Bulletin is sent to all members not in arrears for dues. The subscription price is $1.50 a year, invariably in advance, in the United States. Outside of the United States the subscription rate is $2.00.

All articles and communications for publication, books and publications for notice, and exchanges, should be addressed to the Editor.

New subscriptions, changes of address, and applications for membership should be addressed to the Secretary. Personal items, news of events in the scientific world, and other notes suitable for our "Notes Here and There" department may also be addressed to the Secretary.

Claims for lost and undelivered copies of the magazine may be addressed to the Editor.

The present editorial organization is as follows:

T. C. Stephens, Editor-in-Chief, Sioux City, Iowa.
Dr. Lynds Jones, Oberlin, Ohio.
Prof. Myron H. Swenk, Lincoln, Nebraska.
Prof. Gordon Wilson, Bowling Green, Kentucky.
Mr. Wm. I. Lyon, Waukegan, Illinois.
Mr. Chas. J. Spiker, Sioux City, Iowa.

THE WILSON ORNITHOLOGICAL CLUB

Founded December 3, 1888. Named after Alexander Wilson, the first American ornithologist.

The officers for the current year are:

President—Albert F. Ganier, 2507 Ashwood Ave., Nashville, Tenn.
Vice-President—Thos. H. Whitney, Atlantic, Iowa.
Secretary—Prof. Gordon Wilson, Bowling Green, Ky.
Treasurer—Ben J. Blincoe, R. F. D. No. 13, Dayton, Ohio.

The membership dues are—Sustaining membership, $5.00; active membership, $2.50; associate membership, $1.50 per year.

Goshawk About To Attack

UNIV. OF MICH.

THE WILSON BULLETIN

A QUARTERLY JOURNAL OF ORNITHOLOGY

Vol. XXXVII. No. 4 December, 1925

Old Series VOL. XXXVII. New Series VOL. XXXII.

NOTES ON THE NESTING OF THE GOSHAWK IN POTTER COUNTY, PENNSYLVANIA

BY GEORGE MIKSCH SUTTON

The nesting of the Goshawk (*Astur atricapillus atricapillus*) has been noted and studied in Warren County, Pennsylvania, for years past, by Messrs. Ralph B. Simpson and Harry Grantquist, of Warren. While the breeding range of the bird has thus been known to extend southward into the northern and mountainous counties of Pennsylvania, the species is of sufficient rarity in the State to warrant special notice wherever it is found. I therefore welcomed the recent opportunity of visiting the southern part of Potter County with the intention of becoming more familiar with the home-life of this splendid bird of prey.

Upon establishing myself at Conrad (locally known only as Hull's Station) I soon found that while the Goshawk was considered rare by th local residents, there were positive evidences of the previous nesting of the birds in the region, and since either specimens or remains of specimens were examined to establish the accuracy of the records beyond question I do not hestitate to enter them here.

On May 10, 1923, at a point in extreme southeastern Potter County, not far from Slate Run, Lycoming County, Mr. Hayes Englert found a nest about forty-five feet up in a large beech tree. The nest held four half-grown young at the time and was a huge, bulky affair built into a deep crotch. The female bird only was seen, and she was subsequently shot while feeding from the carcass of a black bear. I examined this large and beautifully plumaged specimen. During the following fall season several Goshawks were seen in the region of State Game Refuge No. 7, in extreme southeastern Potter County, and one large female bird was shot on November 1, 1923.*

On May 25, 1924, at Roulette, Potter County, Mr. Harry Van Cleve found a huge nest, thirty-five feet from the ground in a three-prong crotch of a comparatively small beech tree. The nearby trees were all higher than the one containing the nest, but the crotch in which

*Specimen preserved and examined.

the nest was placed had evidently been chosen with considerable care. At this date there were four small, downy white young in the nest. The tree was shortly thereafter felled and the nest and young destroyed. One young bird which was not noticed among the debris when the tree was felled was later found in a mummified condition.

On March 20, 1925, at Conrad, Potter County, Mr. Ernest Hunsinger first observed the mated pair of Goshawks in the woods where they subsequently reared their young. The nest was completely built at the time and presumably had been used during the previous year; but not until March 31 was it actually determined that the birds were using the nest, since on this date three eggs were found. There was heavy snow on the ground when the birds were first seen and during most of the period when the eggs were known to be in the nest. The spring usually comes late in these wild portions of the Pennsylvania mountains, and the winters are usually severe.

On April 27 there were two downy white young in the nest, only recently hatched. The third egg, which did not hatch, was already covered with debris, and was not seen at the time of this visit. On May 12 the young birds had grown considerably. The flight feathers were appearing all along the wings, and rows of dark heavy feathers showed on the chest, head and shoulders. On this date the head of what was supposed to be a brown leghorn hen was found neatly severed from the neck, and lying to one side on the rim of the nest. It occurs to me that this might have been the head of a Ruffed Grouse. The male bird, while observed once or twice, was always very shy, and several times it was feared that he had been killed. The female was always close at hand, however, and dangerously bold whenever the nesting tree was approached.

Not until May 19 did I have opportunity to visit the nest myself, however, and I made plans to remain at the nesting tree all day, so that I might personally witness a little of the family life of the handsome birds. As we crept up the narrow mountain road, wide valleys spread about us, fresh green with new leaves which were obviously not as far advanced as they were farther south in Dauphin County, or west in Crawford County where I had just been. The forest was composed chiefly of deciduous trees although there were a few pines and spruces, and the deeper ravines were crowded with hemlocks. Maple and beech predominated however, and there were occasional patches of yellow birch and slender white birch on the plateau-like ridges.

When we were within about six hundred yards of the nest the female bird came out to meet us. She screamed and circled about and

escorted us invectively to her nest where her fury increased and where she swept down at the man who happened to be nearest the home tree. While the tree was being climbed the female bird screamed almost constantly and she struck fiercely with her talons at every dive. The commotion straightway aroused the two well-feathered young, although the male parent did not appear. The young birds, hunched up grotesquely in their high cradle pranced out to the peripheral twigs and the smaller one after leaving the nest and mounting a nearby branch set up a series of screams which resembled those of the mother, but were higher and less powerful. When the foundation of the nest was finally disturbed the young male bird (the smaller of the two at least and the one which had crawled out of the nest) swung into the air, and, flapping uncertainly, reached the ground two hun-

Photograph by J. J. Slautterback.

NEST OF THE GOSHAWK, SHOWING NESTLING MALE ABOVE, AND, AT LEFT OF SUTTON, THE FEMALE PARENT WHICH HAS STRUCK.

dred feet away. The larger bird (presumably a female) was sullen in temperament and stocially refused to leave or to cry out. The nest was not carefully examined since it was my purpose to leave conditions as much undisturbed as possible so as to be able to witness the normal home life of the birds.

Before my companions left me I crawled into a rudely constructed blind where I crouched motionless, hoping that I would not be detected by the hawks. The female bird drove the departing group of men to the edge of the woods and then returned, calmer for an instant or two, apparently, and then, spying me without the slightest difficulty,

redoubled her fury and bore down upon me with savage intent. Intrepid and insistent she swooped at me from all directions and only the branches of the blind kept me from the direct blows of her feet although the protecting boughs cracked and snapped at each onslaught. My being alone doubtless increased her daring and she perched at a distance of only twelve feet and screamed in my face, her bright eyes glaring, and her powerful beak expectantly parted. To lessen the agitation I gathered up the young bird, obviously against his own wishes, and started across an open space toward a log where I intended to place him. I had scarcely wormed out of my little blind when I was soundly thumped on the shoulders, and before I reached the log where I stationed the young bird I had been struck either an averted blow or a direct one, half a dozen times. I hastened back to the blind as soon as possible. With the Sept camera in hand I photographed the attacking bird, and while I tried to steel my nerve to accept the blows of her feet without flinching, I found I could not. Every time, when I saw her glowing eyes, partly opened bill, and loosely poised feet descending upon me I ducked and raised my arms in spite of myself. Had I not worn a strong cap and a cloth about my neck no doubt her talons would have brought blood more than once; and it was evident that the claw of the hind toe was most powerful and effective, since that nail dug in and dragged as the bird passed on.

During the course of the day I was almost constantly attacked and screamed at by the female bird. For eight hours she remained at her post, and she never seemed to become accustomed to me, although I purposely disturbed nothing, and made little commotion. Her anger was heightened by the screaming of the young bird of course, and any movement on my part made her attacks more vehement. Once she struck a hard blow at my protruding feet when I tried to scrape a biting black fly from one ankle with the toe of the other foot.

From 8:00 A. M to 1:30 P. M. I heard her give only two call-notes. The most commonly given was the well known "*Ca, ca, ca, ca*" rapidly repeated and with a heavy goose-like quality that was noticeable. The first two syllables of such a series of screams were often hoarse and throaty with a sinister, double-toned character. Sometimes when the bird was passing swiftly through the trees to a perch she called "*Kuk, kuk, kuk*" in deep, somewhat milder tones. This note was decidedly like the warning note of the Blue Goose as heard in the James Bay region.

From 12:45 to 1:30 P. M. I remained almost absolutely quiet and feigned sleep as best I could in spite of the innumerable black flies

which became increasingly annoying as the day advanced. But after this period of quiet the voice of the female bird suddenly changed, and her screams were so high, clear and plaintive that I was honestly startled. This new note sounded like "*Kee-a-ah*", and reminded me of the call of the red-shoulder, but was more powerful and at the same time more musical, and had a plaintive character that rather affected my sympathy. I sensed immediately that this call indicated a change of some kind in the bird's attitude. Suddenly the dark, swiftly flying male appeared, bearing in his claws a black squirrel. His scream as he approached the nest was long, high and thin, and not nearly so powerful as that of his mate. I moved only a trifle to be able to observe to better advantage, and instantly the male bird departed and the female swooped down upon me, angrier than ever. The male bird stayed about, calling in rather weak tones which were much like those of the red-shoulder, with a more quavering quality. The male never dived at me; but later he perched above me with a chipmunk in one foot, and I glimpsed his handsome, dark coloration through the moving leaves. When he was perched he gave a unique single call note resembling "*Kek*" and more than once I heard that note in the distance although I could not spy the bird.

To the best of my knowledge the young bird in the nest was not fed all day, and the one on the ground certainly not before late afternoon, but they never raised any voluntary commotion although they must have been hungry. The female bird did not feed until 4:00 P. M., at which time she took her attention from me, and with magnificent ease and swiftness pounced upon a chipmunk almost under my nose, and proceeded to strangle the kicking rodent at a distance of only about twenty feet. She did not bite the creature at all, so far as I could see. When the little mammal was dead she ate it ravenously, making hoarse guttural sounds while she ate, but she was evidently careful to pick it into small pieces before swallowing. Later she rushed in to the young bird on the ground and fed it small portions. The young bird did not cry out.

Toward evening the female bird paid somewhat less attention to me, accepting me, I suppose, as part of her daily fate. Her attacks, however, were more to be feared, because she screamed less and there was no way of knowing of her approach. But when my companions returned to get me she sailed off to meet them and renewed her tireless calling at a safe distance. The presence of several men seemed to frighten her considerably. I climbed to the nest twice. It was a great bulky affair, about three and one-half feet across, and three feet in

depth, and rather beautifully designed for so large a structure. It was placed in a three-prong crotch about thirty-five feet from the ground in a comparatively slender beech. The nest was probably not more than two seasons old, since there were but two recognizable layers in the lining. In the shallow cup of the nest where the sullen nestling female sat were the hindquarters of a large black squirrel from which nearly all the hair had been pulled, and a chipmunk, freshly killed, and without a spot of blood or broken bone anywhere in its body—as neatly laid out as a museum specimen! Fresh sprigs of hemlock were laid about; and an abundance of hemlock needles in the nest were evidence that this fresh lining had been often renewed. About four hundred pellets, varying in size considerably, were removed for examination, and about two and one-half inches under the debris was found the infertile egg! The nest was surprisingly clean.

Careful examination of the pellets showed at once a surprisingly small proportion of feathers although it will be admitted that before they were brought to the nest the bird bodies may have been completely plucked. The young had evidently been fed almost altogether upon chipmunks, although fur and some small bones of gray and black squirrels, weasels and white-footed mice were also found. At the foot of the tree there were no Ruffed Grouse remains whatever, although there was a primary feather from the wing of a Hairy Woodpecker in the nest. A pair of Slate-colored Juncos which were nesting nearby paid not the slightest attention to the hawks, and so far as I could see the female bird never once noticed them. From all my observation at this time I should be inclined to revise my opinions considerably as to the bird-killing proclivities of this predatory species, although the local abundance of chipmunks doubtless affected the bird's bill-of-fare.

The eye of the adult female was not red; it was a bright brownish orange, paler about the pupil. The eye of the male bird, observed at a distance, was seemingly brighter and a more scarlet red; and an immature male, shot on the same day not far away (probably a last years' bird) had brilliant yellow eyes. The irides of the nestlings were pale blue-gray in color, and the cere and feet were dull grayish green.

The most memorable thing about the day's experience was the method of attack of the female bird, which has partly explained to me the ease with which some of these birds capture their prey. When the Goshawk left her perch to strike at me her set wings and slim body were for several seconds almost invisible and the only actual move-

ment perceptible was the increase in the size of her body as she swiftly approached. Three times at least I was looking directly at the approaching bird *and did not see her at all* because the lines of her wings and body so completely harmonized with the surroundings, and the front view was comparatively so small.

In alighting the bird struck heavily and often the dead branches were completely broken off. Her every movement combined power, grace, and swiftness in an amazing degree, and only once, as she sped by me did I succeed in whacking her with a stick. She seemed so surprised at my ability to fight back that after my clumsy victory she was quiet for over ten minutes and viewed me pensively from the top of a distant tree!

The bird often sat upright with one foot drawn up among the belly feathers or protruding a short distance. The fluffy under tail coverts were very prominent and always obscured the base of the tail from the front by sticking far out on either side.

Pennsylvania Board of Game Commissioners,
Harrisburg, Pa.

OBSERVATIONS ON SHORE BIRDS IN CENTRAL OKLAHOMA IN 1924

BY MARGARET MORSE NICE

By great good fortune for the birds and us, the wet winter and spring of 1924 changed what had been a low swampy spot in the midst of a cornfield into a shallow pond, not far from our home in Norman, Oklahoma. The farmer who owned the land did not share our view of the matter for he put in an elaborate drain, but luckily for the ducks, the shorebirds and us, he made the mistake of placing it too high, so the pond remained and the birds flourished. Our first visit was made on April 4; from then until June 10 we made trips to it two or three times a week, except for the first ten days in May when we did not go at all. All the birds but a pair of Killdeers were transients, there being no suitable cover for nests for the few species that do breed in the region.

Not many birds except ducks and shorebirds frequented this pond. Of these, the Black Terns were the most entrancing as they coursed gracefully over the water. Twenty were seen May 11 and about fifty the next day (most of them following a farmer who was harrowing a nearby field); from the 14th to 20th there were thirty to forty, but after that their numbers diminished until only two were seen May 30;

none were noted June 1 and 8, but three flew over on the 10th. A single Least Tern was recorded on May 25. Five Coots were observed May 11, ten on May 15, and after that from two to five at nearly every visit until June 1; sometimes they marched about in the neighboring corn field. A Bittern was flushed May 14. On May 25 and June 8 a male Red-wing Blackbird sat on a corn stalk and sang. Only four swallows were recorded; two Purple Martins on April 30 and one Barn and one Bank Swallow on May 25.

The Ducks

Ducks were seen at every visit but two—April 11 and 17; on the latter date they had apparently been frightened away by two dogs that were rushing about in the water barking at the shorebirds. They were sometimes abundant and usually fairly tame. Blue-winged Teal and Shovellers were the most common. The former were seen in numbers varying from ten to thirty from April 6 to May 20; after that one male was noted May 23 and June 1, while three were recorded June 10. They often would rest on the bank and waddle deliberately down to the pond for all the world like domestic fowl. Eight Shovellers were noted April 4, twelve on April 6 and 8, but only two on the 15th; from May 11 to 20 there were about ten at the pond, but after that none until May 30, when three males were seen; these were present at each subsequent visit, having been joined by a fourth male on June 10. Pin-tails were observed in small flocks from April 4 to 8; after that only one bird was seen; he must have been crippled as he never attempted to fly; he was last recorded May 11. From three to fourteen Scaups—we were always so busy studying shorebirds that we never tried to puzzle out whether they were Greater or Lesser—were noted from May 11 to 25; there were usually two males and five or seven females. One female on May 30 was the last one seen. Three species were recorded once each: six Baldplates on April 6, three Green-winged Teal on April 30 (one had been shot by a boy), and two male Canvas-backs on May 23.

The Shorebirds

Shorebirds were seen at every visit from April 4 to June 8; two days later the last had left. Most of them were delightfully tame until near the end of the season; from May 20 the birds were timid and difficult to approach. Probably these later birds were a different set from the earlier; on May 15 there was a wonderful array of shorebirds—seven species and at least sixty individuals, but on the 18th only one Yellow-leg and four Semipalmated Sandpipers were to be

seen. Two days later there were four species and about forty individuals—"*all very scary*", according to my notebook. By the 30th there were nearly a hundred birds of four species, these were moderately timid. June 1 only twelve shorebirds were left and by the 8th four.

Twice when one bird out of a flock was shot, most of the others came flying back to see what the trouble was, hovering over the place of the accident; this did not happen, however, in other instances. On April 8, an Accipiter came flying by; instantly all the shore birds sprang into the air and flew wildly about, but the ducks remained placidly in the water.

Specimens of six species were collected by L. B. Nice; these are indicated by asterisks.

Wilson Phalarope (*Steganopus tricolor*). On April 5 a male appeared and joined company with three Lesser Yellow-legs; the next day he was flocking with the Dowitchers. No others were seen until May 11 when fourteen of both sexes of these dainty birds were swimming about. The next day to our disappointment all had left. Two males on May 14 and 15 were the only others observed.

Wilson Snipe (*Gallinago delicata*). These were common in the grass about the pond April 5 and 6; while a few would be flushed as late as the 22nd. Only once did we see one at the pond itself; all the rest of the time during our visits they remained concealed in the vegetation.

Long-billed Dowitcher (*Limnodromus griseus scolopaceus*). On April 5 four of these curious birds suddenly flew down into the pond and then stood stock still for a long time—the greatest contrast to the busy activities of most of the shorebirds. One Dowitcher did preen itself a little with its absurdly long bill. At last they flew with a cry, showing their narrow white rumps. They were seen April 6 and 8, always keeping close together. They were in winter plumage.

*Stilt Sandpiper (*Micropalama himantopus*). Six of these birds in summer plumage were seen on May 14 and 15. They stayed in a compact flock by themselves.

*Pectoral Sandpiper (*Pisobia maculata*). These were first seen on April 11 and were noted at nearly every subsequent visit until May 25. There were usually about eight or ten of them, but on April 24 there were as many as twenty. They showed no clannish tendency, running about independently and flying with the Semipalmated Sandpipers.

*White-rumped Sandpiper (*Pisobia fuscicollis*). This bird was first identified on May 12 when one was collected; we might well have overlooked it previously. Two were noted May 20, four or more on May 30 and two as late as June 8. The squeaky "jeet-jeet" as they flew was quite distinct from the noise of the Semipalmated Sandpipers with whom they associated.

Least Sandpiper (*Pisobia minutilla*). Only one of these was identified; we distinguished it from the Semipalmated Sandpipers by its yellowish rather than black legs. It was a very tame little bird. May 11 was the date of its appearance.

*Red-backed Sandpiper (*Pelidna alpina sakhalina*). These birds were the most exciting find of all for they had never been previously reported from Oklahoma. Four of them in striking summer plumage visited the pond on May 15; they stayed together in one flock. The specimen collected constitutes the first record for the State.

*Semipalmated Sandpiper (*Ereunetes pusillus*). This was the most abundant species and was seen for the longest period—from April 4 till June 8, when only two were left. Their numbers in April and May varied from about twenty to nearly a hundred except on May 18 when only four were present. We decided after much study that all the "Peeps" that we examined through field glasses belonged to this species; 1st, because all had black legs; 2nd, they all looked greyish; 3rd, their bills all looked alike. The two specimens taken proved our judgment correct.

It was an entertaining sight to see these little birds that were running in and out of the water all day take regular baths just like any Song Sparrow.

Hudsonian Godwit (*Limosa haemastica*). These great shorebirds were a thrilling sight. The first, in the chestnut summer plumage, was discovered May 11 feeding in the weeds only fifteen feet from us; it was so tame that we were enabled to study it at leisure. Three others were seen on the other side of the pond. The next day we took the gun hoping to collect a godwit, as they had never been reported from the State, but not one was to be seen. On the 15th, however, we saw three in winter plumage; they were wary and flew away showing their white rumps. In the afternoon three flew away again. Later in looking over the birds in the museum of the University of Oklahoma (the museum is very inadequately housed in a basement and its collections difficult of access) we came upon three specimens of the Hudsonian Godwit which had been collected by E. D. Crabb in Canadian County, Oklahoma, in 1911.

Greater Yellow-legs (*Totanus melanoleucus*). Both Yellow-legs were present in small numbers at nearly every visit; we were thus enabled to distinguish them by direct comparison as well as by their notes. Greater Yellow-legs were seen from April 8 to May 30.

Lesser Yellow-legs (*Totanus flavipes*). These were seen from April 4 to June 1. Neither Yellow-legs seems to be a clannish bird with its own kind as were the Dowitchers, Red-backed and Stilt Sandpipers, but each ran bobbing about more or less independently of others of its kind.

Willet (*Catoptrophorus semipalmatus* subs?). Five of these great birds furnished the special excitement of May 12; they were plain looking enough when seen at rest but astonishingly striking as they flew with loud cries exhibiting their black and white wings.

Spotted Sandpiper (*Actitis macularia*). These teetering little creatures were seen on only four visits: one on May 11 and 23, and two on May 25 and 30.

Killdeer (*Oxyechus vociferus*). A pair were present near the pond all the season and must have nested nearby. On May 30 and June 1 another pair was in evidence.

*Semipalmated Plover (*Charadrius semipalmatus*). Only one of these little Ring-necked Plovers was seen, May 15; it was collected, since the only previous instance of its occurrence in the State was a sight record.

AMHERST, MASS.

THE WHIP-POOR-WILL: ITS PROSPECTS OF SURVIVAL IN SOUTHERN IOWA

BY E. D. NAUMAN

During the decade from 1875 to 1885 my home was with my parents beside an extensive forest on the bank of Clear Creek in the eastern part of Keokuk County, Iowa.

At that time and in that locality Whip-poor-wills were regarded as among our common birds. Judging from the frequency of their calls in every direction at night, as well as the numbers flushed in daytime, I feel sure that they must have been as common as Robins were at the time. However, the Robin has steadily increased in number, while the Whip-poor-will has just as steadily decreased.

During the summer of 1879, I think it was, a Whip-poor-will took the queer notion of alighting on our cabin doorstep to chant, evening after evening, for a fortnight or more. And we had both

cats and dogs! At this time I had opportunity to hear his call at very close range. The call, which consists of three syllables, is uttered loudly, so as to be heard at considerable distances; but here I discovered that there is a fourth syllable resembling the word "duck", uttered in a low undertone immediately after the "will" and between the two successive calls. The sound of its voice is heard from the time of its arrival here, about April 20, to the middle of July. September 12 is the latest date upon which I have seen the bird here.

In those days, however, I made no effort to find their nests or to observe their habits of life. By the term nest, when speaking of this species, I mean the place where the eggs are laid. They never make any more of a nest than a slight depression in a bed of dry leaves on the ground under some sheltering bushes, in the woodland.

In more recent years, since my residence in Sigourney, in the same county, I have given more attention to them, and have found a few of their nests, and have made some observations which I will briefly relate. The eggs are always two in number and are grayish in color, mottled with brown spots.

On June 2, 1913, I found a nest with eggs at the side of a fallen tree trunk, under some overhanging bushes. This was in a small oak timber tract near Sigourney. When I approached the nest the bird flew silently away, without making the least demonstration of any kind. I did not go any nearer the nest than was necessary to see the eggs, and departed without disturbing any of its surroundings. But when I went back in five days the eggs were gone and no sign of them remained. Neither was there any evidence of any disturbance of the leaves upon which they rested. It appeared to have been the work of a snake. The underbrush and most of the trees on this tract have since been destroyed, and the land is now being used for a hog pasture.

On May 29, 1915, I found a second nest of this species with eggs, under some overhanging hazel brush and scrub oak timber on a tract of land for which I was preparing a bird census at the time. On leaving the nest this bird at once began to mimic an injured bird. She fluttered along on the ground and through the grass for some distance in a most helpless manner; then she suddenly flew away and disappeared in the larger timber. I went back in six days and found two fine yellowish, downy young birds which seemed to be exceedingly large for their age. The mother bird made the same kind of a demonstration as she did before, fluttering about in the grass and brush; however, she did not fly away this time, but stayed near as long as I was there.

Fearing that some dogs might follow my tracks if I went there too often, I did not return for ten days. But by that time the young birds were gone. I cannot say positively that these young birds left their nest in safety at the end of sixteen days, but there was no evidence to indicate that the natural course of events had been interrupted. The timber and brush tract where this nest was located has since been destroyed, and the land has been converted into a cultivated field.

In the next season, June 3, 1916, I found a third nest with eggs in a ten acre tract of large elms and hickory trees within the city limits of Sigourney. It was among some barberry bushes and under a small, overhanging hickory tree. When the bird was flushed from this nest she behaved somewhat differently from either of the other three here reported. She flew in an excited manner from bush to bush, occasionally darting at me, and all the time uttering a gutteral, croaking sound that could be interpreted to mean a full broadside of vituperation and imprecation. This action on her part brought the mate into the arena. But he was shy and contented himself with flitting about among the bushes at a little greater distance, and only occasionally emitting a gutteral croak.

On returning a few days later I found one young bird, which appeared to be at least three times as large as the other unhatched egg. The parent birds acted about the same as they did on the previous visit. The following night a heavy storm of wind, lightning, and rain passed over. Next morning I visited the nest to learn what the effect of the storm had been. Neither young nor old birds could be found; the one infertile egg was in its place. The young bird was, of course, unable to fly. On the same trip I visited an Indigo Bunting nest in some nearby hazel brush and found the three young dead in the nest.

All of the bushes, underbrush, and some of the trees in this tract have since been destroyed, and the land has been converted into a hog pasture.

On June 5, 1920, I found a fourth nest of the Whip-poor-will on dry leaves under a gooseberry bush among evergreen trees near a vacant farm-house. As the bird flushed she tumbled on the ground a short distance and swiftly disappeared without making any sound. This nest was not visited again. The field and premises where this nest was located have, for the past two years, been used as a sheep pasture, and all cover has been destroyed by the sheep.

Thus we see that while the voice of this interesting and useful bird may still be heard occasionally on warm and quiet nights, the

day is not far distant when farmers, gardeners, and horticulturists will have a myriad more of night-flying bugs, moths, and millers (and their larvae) to contend with, unless we can manage to save some suitable nesting sites for this most valuable bird.

SIGOURNEY, IOWA.

NOTES ON THE SHORE BIRDS OF CENTRAL IOWA

BY W. M. ROSEN

Boone County, located almost in the center of Iowa, was formerly dotted with hundreds of ponds and sloughs; and in 1870, when my father first came here, this was the home of thousands of water fowl and shore birds. We of the second generation are not allowed to witness scenes such as they saw in those early days. However, this spring (1925) it was my great privilege to observe what to me was the best migration of shore birds and water birds that I have seen here. Our ponds have almost all been drained, and where formerly was the home of the Blue-Winged Teal, Bitterns, rails and Yellow-headed Blackbirds among the cattail rushes, now wave the vast fields of Iowa corn. However, there still remain a very few small shallow ponds in meadows here and there and it was in these that I made the acquaintance of some of our beautiful and dainty shore birds during migration this spring.

The first Lesser Yellowlegs appeared on April 19; the Bartramian Sandpipers on April 24, and the Greater Yellowlegs on April 26. The Spotted Sandpipers were noted first on May 2, as were also the Green Heron and the Sora Rail. The Wilson Snipe was on hand on the 28th of March which was about the time that the ducks were stopping to feed in our ponds on their way northward. The long drouth in the month of May caused the water in our shallow ponds to recede and this left the large mud flats on which the shore birds found a great amount of food and then it was that I found a sight that I had longed to see, a good collection of shore birds to study at close range.

On the morning of May 3 we found in the center of a small pond, which was but a few inches deep, a large Canada Goose which stood like a giant surrounded by nineteen Lesser Yellowlegs and two Greater Yellowlegs. The same morning in another pond we found our first Pectoral Sandpipers.

On May 10, just a week later, we found in one small pond the following: eight Least Sandpipers, one Semipalmated Sandpiper, one Pectoral Sandpiper and one Lesser Yellowleg. These were all ob-

served at close range and a positive count made of them and their markings observed. The small sandpipers seemed to be fearless, as we could approach to within fifteen feet of them before they would fly. On this same morning we found our first Wilson Phalaropes in another pond and with them was one Northern Phalarope. These beautiful birds gave us a nice example of their favorite pastime of "pivoting" or whirling around and around while standing in one spot in the water and giving their peculiar little grunting sound. There was but one Northern Phalarope with the group.

On May 13 we were thrilled by the sight of our first Semipalmated Plover, which is quite a rare bird here, as was the Virginia Rail which we also observed that same morning. On the 17th the first Red-backed Sandpiper appeared at the same time as the Least Bittern and meanwhile the others were here in their usual numbers and it remained for the grand finale to be put on for us on the following Sunday, May 24. In one small pond by actual count there were forty-four shore birds and among them was just one Red-backed Sandpiper; and when the Least and Semipalmated Sandpipers would rise and fly over the pond wheeling with the wind turning up their pure white underparts it made a very pretty sight and this lone red-back would accompany them and his black belly was quite noticeable clear across the pond. The sight of the year was in store for us in the larger pond about a mile away, for when we alighted from our car and walked toward the pond we found that it was fairly covered with shore birds feeding industriously. By actual count I made over two hundred and then there was a large section that I could not count so that I can safely say there were 250 of them in all. There were scores of Least Sandpipers, dozens of Semipalmated Sandpipers, a few Pectoral Sandpipers, and one lone Stilt Sandpiper; while along the shore nimbly ran the Spotted Sandpipers, and with them three dainty Semipalmated Plovers. As we were seated on the ground with our glasses glued on this beautiful sight there appeared right before us on the shore a beautiful specimen of the Le Conte Sparrow, just as if he had been sent to complete the picture.

We watched this beautiful sight, the like of which I had never seen here before, admiring the beautiful Wilson Phalaropes which were also in this great flock. All seemed to be busy feeding, and happy; while over head flew the Barn Swallow with its sweet twitter, and the noisy Redwing with its "clonk-a-lee", and from the rushes in a distant pond came the song of the Long-billed Marsh Wren. From the upland pasture behind came the beautiful whistling call of the Bartramian

Sandpiper which remained and nested with us this summer. The Black Terns circled overhead. By a careful count over the entire pond I found eight Red-backed Sandpipers there at one time.

We remained for an hour or more watching this great flock of birds at work feeding, and marveled at the sight which became so fixed in my mind that I will never forget it; when I am older I can tell the younger generation of the beautiful shore birds observed in the spring of 1925 in one of the last remaining ponds of the prairies of Iowa.

Ogden, Iowa.

SUMMER BIRDS AT HURON MOUNTAIN, MICHIGAN

BY BAYARD H. CHRISTY

The ensuing list of birds is the result of a visit to the Huron Mountain Club, Marquette County, in the northern peninsula of Michigan, from May 21 to June 17, 1925. The area traversed lies within a radius of ten miles from the mouth of Pine River, which empties into Lake Superior about forty-five miles west of Marquette; it lies between the Salmon Trout River on the east and the Little Huron River on the west; it includes the Huron Islands, two miles off-shore; and extends southward, as has been said, about ten miles. The region is rugged, with broken granitic mountains whose summits rise about nine hundred feet above the lake surface, and is well forested, with both conifers and hardwoods. Headlands of red sandstone stand out in the lake, with beaches of coarse sand in the bays between. A dozen lakes varying in length from three miles and a half to a hundred yards afford further diversity. Some of these lie in littoral sand plains, some beneath granite crags; some are deep, some shallow and choked with sphagnum bogs. Clear, cold streams lead from lake to lake and to Lake Superior. The area is largely the preserve of the Club named above.

The list is essentially one of the summer birds, but it includes also a considerable number of transients; for at the beginning of the period the tide of migration was still at flood. The transients, however, are, with few exceptions, easily distinguishable, as will be apparent on reading the notes. The list could not, under the circumstances, be all-inclusive; but it may be found useful for reference, and may perhaps serve as a beginning in the preparation of a complete check-list for the locality.

[The following list contains 122 named forms.—Ed.]

Loon—*Gavia immer*. A pair was noted on each of the inland lakes, and other pairs were seen at intervals along the shore of Lake

Superior, and at Huron Islands. On Lake Superior it was not uncommon to see two pairs in a party together, and in one case a fifth bird, in winter plumage, was observed. On June 13 on one of the inland lakes a chick was seen on its mother's back.

Herring Gull—*Larus argentatus.* Abundant, frequenting the beaches, and making excursions to the inland lakes. A nesting colony was found on the Huron Islands (a sanctuary under the control of the National Association of Audubon Societies) numbering, roughly, between 2000 and 4000 adults. On June 15 a few nests still contained eggs, but for the most part the chicks were hatched, and were running about and taking to water when disturbed. All were in downy plumage, and none was able to fly.

Merganser—*Mergus americanus.* Frequently met, on all waters. A pair was nesting in a large birch stub, forty feet high, standing in the woods, a hundred yards from a running stream. May 31, and repeatedly thereafter, females with ducklings were encountered; the broods numbered from eight to twelve. When disturbed the mother swims away carrying most of her brood on her back, the others swimming, or perhaps clinging, behind.

Black Duck—*Anas rubripes.* Not uncommon on inland waters. On June 15 a half-grown brood of young was seen in the alder-grown slack water above a beaver dam on the Little Huron River; another brood was seen on June 17 in an alder swamp edging a boggy lake.

Lesser Scaup Duck—*Marila affinis.* A single female was seen on an inland lake on May 25; also a pair on another inland lake on May 29, and on June 5 another pair on Lake Superior. The head of one of the drakes, examined through a field glass, seemed to be violet, without green reflections; accordingly, that pair was, with some assurance, set down as *affinis.* The others were, in all liklihood, of the same species. All, doubtless, were transients.

Bittern—*Botaurus lentiginosus.* Not uncommon in bogs. On June 3 I flushed one from grass in a tamarack swamp, and from the fact that it returned immediately after my departure I judged that it was nesting.

Least Bittern—*Ixobrychus exilis.* One was flushed from the reeds at the margin of a boggy lake, on June 17.

Great Blue Heron—*Ardea h. herodias.* Common. Found in pairs in remote, shallow bays of all the small lakes, and on the streams as well.

Virginia Rail—*Rallus virginianus.* Encountered twice, on May 30 and June 17. A summer resident, no doubt.

Woodcock—*Rubicola minor*. In a beaver meadow on the Salmon Trout River on May 30 I heard and saw a Woodcock at dusk, performing its sky dance.

Wilson's Snipe—*Gallinago delicata*. On June 13, at twilight, above a boggy lake, I noted a snipe "bleating"—a most inappropriate term when applied to our bird.

Least Sandpiper—*Pisobia minutilla*. A single bird was seen on a sandbar in Pine River on May 31. A transient visitant.

Semipalmated Sandpiper—*Ereunetes pusillus*. On June 3 a single bird was seen on a sandbar in Pine River. A transient visitant.

Yellow-legs—*Totanus flavipes*. On June 5 one of these birds spent the day and remained till after dark (a moonlight night), feeding, on a sandbar in Pine River. A transient visitant.

Solitary Sandpiper—*Tringa s. solitaria*. Two individuals were seen, separately, on May 26, on inland waters. I failed to find any remaining to nest.

Spotted Sandpiper—*Actitis macularia*. An abundant summer resident, along the margins of the lakes and streams.

Killdeer—*Oxyechus v. vociferus*. Transient chiefly; a few remain as summer residents in favorable places.

(Canada Spruce Partridge — *Canachites canadensis canace*. Searched for in likely places, where in earlier years I had found it, but without success.)

Canada Ruffed Grouse—*Bonasa umbellus togata*. A permanent resident, generally distributed, which is becoming rather rare. A hen with a newly hatched brood of young was found on June 17 in an alder swamp.

Mourning Dove—*Zenaidura macroura carolinensis*. On June 5 and 6 a single individual was heard and seen in a second growth of jack pines, on sand plains near Lake Superior.

Marsh Hawk—*Circus hudsonius*. A single adult was seen on a drive from Marquette. It was sought in vain in a cranberry bog where in past years I have found it—though at a somewhat later season.

Sharp-shinned Hawk—*Accipiter velox*. Not uncommon. It was observed on sand plains grown with jack pines, near Lake Superior.

Cooper's Hawk—*Accipiter cooperi*. Less common than *velox*. One was seen on Salmon Trout River.

Red-tailed Hawk—*Buteo b. borealis*. A common summer resident, widely distributed.

Broad-winged Hawk—*Buteo platypterus*. On May 29 a pair was seen on the shore of an inland lake (nesting?). On May 30 a single

bird was seen on another lake.

Bald Eagle—*Haliaeetus l. leucocephalus.* Two birds, in immature plumage, were repeatedly seen throughout all the period, both about the inland lakes and Lake Superior.

Duck Hawk—*Falco peregrinus anatum.* One of these birds was seen on a sandstone cliff, facing Lake Superior, on June 11.

Pigeon Hawk—*Falco c. columbarius.* On May 25 and 26 a single individual was observed on Pine River. Doubtless a transient only.

Sparrow Hawk—*Cerchneis s. sparverius.* Not common; seen about clearings.

Osprey—*Pandion haliaetus carolinensis.* Was seen infrequently, though a regular summer resident.

(Long-eared Owl—*Asio wilsonianus.* On May 25, near the shore of a small lake, a bird flew from a low perch in level course and dissappeared in the shadows of a growth of jack pines. Sure identification was impossible, but I am reasonably confident that it was this species.)

Barred Owl—*Strix v. varia.* A common permanent resident, heard calling by day from heavy hard-wood timber.

Saw-whet Owl—*Cryptoglaux acadica.* Plentiful. Met repeatedly at dusk in the jack pines, in family groups, evidently. One flew, batlike, low overhead.

Great Horned Owl—*Bubo v. virginianus.* A common permanent resident. Heard calling in the early evening.

Black-billed Cuckoo—*Coccyzus erthrophthalmus.* A single bird was seen on June 16 in a second growth of white birches, on a lake shore.

Belted Kingfisher—*Ceryle a. alcyon.* A common summer resident, found along the shores of lakes and streams.

Hairy Woodpecker—*Dryobates v. villosus.* I am satisfied that both *villosus* and *leucomelas* are present. *Villosus* is rather common about the Club buildings, and in like places; in remoter, heavy hardwood forests the noticeably larger, whiter *leucomelas* is found. To make such determination absolutely certain, collecting would be necessary, and this I was not prepared to do.

Northern Hairy Woodpecker—*Dryobates v. leucomelas.* Not uncommon in the heavier timber, as noted above.

Downy Woodpecker—*Dryobates pubescens medianus.* Common and widely distributed. I was unable, with the glass alone, to make exact identification between the two possible subspecies *medianus* and *nelsoni.*

Arctic Three-toed Woodpecker—*Picoides arcticus.* On June 10

a single female was seen on a high, inland jack pine plain, at the edge of heavy hard-wood timber.

Yellow-bellied Sapsucker—*Sphyrapicus v. varius.* An abundant and well distributed summer resident.

Northern Pileated Woodpecker—*Phloeotomus pileatus abieticola.* A fairly common permanent resident, but at this season it is remarkably silent and secretive, and difficult to find. It frequents the heavy-hard-wood forests, particularly where ash and elm are found. I heard two or three call, and succeeded in observing one male.

Northern Flicker—*Colaptes auratus luteus.* Abundant and well distributed, particularly in open places and old burnings where scattered bare stubs remain standing.

Nighthawk—*Chordeiles v. virginianus.* First seen on May 30; migration continued for several days; many remained. A common summer resident on the sand plains and open mountain tops.

Chimney Swift—*Chaetura pelagica.* A common summer resident, first seen on May 27.

Ruby-throated Hummingbird—*Archilochus colubris.* A common summer resident, first seen on May 31.

Kingbird—*Tyrannus tyrannus.* Common along the margins of lakes and streams. Nests in dead cedars overhanging water.

Arkansas Kingbird—*Tyrannus verticalis.* On June 1 I found a single individual in association (perhaps accidental) with a scattered band of Cedar Waxwings, in an open grove of young aspens, on the Salmon Trout River. It must be regarded as an accidental visitant in this region. (This record was also published in the WILSON BULLETIN, XXXVII O. S., September, 1925, page 173.)

Crested Flycatcher—*Myiarchus crinitus.* A single individual was seen on the shore of an inland lake on June 3.

Phoebe—*Sayornis phoebe.* A common summer resident nesting about the Club buildings and boat houses.

Olive-sided Flycatcher—*Nuttallornis borealis.* Abundant; first noted on May 29. Its call, "*Pip, Three Cheers!*" was often heard from the top of dead, standing timber, usually near water.

Wood Pewee—*Myiochanes virens.* It is common, and well distributed; first heard on May 30.

Alder Flycatcher—*Empidonax trailli alnorum.* Common in alder growths.

Least Flycatcher—*Empidonax minimus.* Abundant and widely distributed.

Blue Jay—*Cyanocitta c. cristata.* Common, and widely distributed.

Northern Raven—*Corvus corax principalis.* Two pairs were noted; one in a forest at the base of a granite precipice; the other at the edge of a slough, draining into the Salmon Trout River.

Crow—*Corvus b. brachyrhynchos.* Common, and widely distributed. A few were seen on the Huron Islands, where, doubtless, they prey somewhat on gulls' eggs.

Bobolink—*Dolichonyx oryzivorus.* On June 13 it was found in abundance in the meadows of a farm on the shore of an inland lake, and there undoubtedly was nesting.

Cowbird—*Molothrus a. ater.* Abundant about stables and pastures.

Red-winged Blackbird—*Agelaius p. phoeniceus.* Common in the open meadows and bogs. The subspecies *fortis* is imputed to this region by Barrows; but such examination as I was able to make through a field glass revealed only *phoeniceus.*

Meadowlark—*Sturnella m. magna.* One individual was seen, on May 26, in a field on the shore of an inland lake.

Bronzed Grackle—*Quiscalus quiscula aeneus.* Common in colonies, particularly at the mouth of streams.

Evening Grosbeak—*Hesperiphona v. vespertina.* A pair was seen, on May 31, in woods on the shore of an inland lake. They were probably belated winter visitants.

Purple Finch—*Carpodacus p. purpureus.* Abundant and generally distributed.

House Sparrow—*Passer domesticus.* There were thriving colonies about the stables.

Crossbill—*Loxia curvirostra minor.* A few wandering bands were seen in conifers, usually in spruces.

Goldfinch—*Astragalinus t. tristis.* Common in the open spaces and clearings.

Pine Siskin—*Spinus pinus.* Fairly common in jack pine plains, and about clearings.

Vesper Sparrow—*Pooecetes g. gramineus.* Not abundant, lacking suitable environment. A few were noted in and near grassy clearings.

Savannah Sparrow—*Passerculus sandwichensis savanna.* Observed in small companies wherever pasture land was found.

White-throated Sparrow—*Zonotrichia albicollis.* Common and widely distributed.

Chipping Sparrow—*Spizella p. passerina.* Abundant in clearings and about dwellings. On June 6 a pair was found nest-building in a small spruce on the tree-line, fronting Lake Superior.

Slate-colored Junco—*Junco h. hyemalis.* Common, particularly in the jack pine plains.

Song Sparrow—*Melospiza m. melodia.* Abundant, especially by the water-side.

Swamp Sparrow—*Melospiza georgiana.* Not uncommon. Noted in marshy places along streams and lake shores.

Rose-breasted Grosbeak—*Hedymeles ludovicianus.* Abundant in hardwood forests. It was striking to see, on May 24, this tropical-colored bird against a snow-covered ground. On June 1 a female was observed at nest-building.

Scarlet Tanager—*Piranga erythromelas.* Common in hardwood forests.

Purple Martin—*Progne s. subis.* Seldom seen—one, or at most a pair together, in vicinity of dwellings. There was a flourishing colony at Marquette.

Cliff Swallow—*Petrochelidon l. lunifrons.* One or two were seen on June 7, with a company of Barn Swallows, milling beneath a log-framed bridge across Pine River at the Club House.

Barn Swallow—*Hirundo erythrogastra.* Abundant about the Club buildings. On June 2 one was observed carrying nest material.

Tree Swallow—*Iridoprocne bicolor.* Common summer resident, nesting in woodpecker holes in stubs standing in and near water.

Cedar Waxwing—*Bombycilla cedrorum.* Common. First seen on May 30. At the end of my stay they were still flying about in bands of a dozen to twenty.

Red-eyed Vireo—*Vireosylva olivacea.* Common. It frequents the hardwood forest and the edges of clearings.

Blue-headed Vireo—*Lanivireo s. solitarius.* Common. First seen on May 24, in association with mixed flocks of migrating warblers. Usually found among or near conifers. A summer resident.

Black and White Warbler—*Mniotilta varia.* A common summer resident, and well distributed.

Nashville Warbler—*Vermivora r. ruficapilla.* A summer resident, and one of the most abundant warblers. First seen on May 31. Frequents second growth.

Northern Parula Warbler—*Compsothlypis americana pusilla.* A common summer resident, which frequents the tree-tops in dense woods; it prefers hemlocks.

Cape May Warbler—*Dendroica tigrina.* This species was noted only as a transient on May 29, in a flock of migrating warblers.

Yellow Warbler—*Dendroica ae. aestiva.* Summer resident. Not common, for lack of suitable environment. Noted in and about clearings.

Black-throated Blue Warbler—*Dendroica c. caerulescens.* A common summer resident, which inhabits the deep-shadowed, damp forests; sometimes found among the hardwoods, but usually among evergreens.

Myrtle Warbler—*Dendroica coronata.* One of the most abundant resident warblers. Found usually in conifers; familiar about the Club buildings.

Magnolia Warbler—*Dendroica magnolia.* Summer resident, not common. Found usually in the evergreen forest, near water.

Chestnut-sided Warbler—*Dendroica pensylvanica.* A common summer resident. Found in the openings and lower, deciduous growths.

Bay-breasted Warbler—*Dendroica castanea.* Noted only as a transient in flocks with other migrating warblers, on May 24-29.

Black-poll Warbler—*Dendroica striata.* Noted only as a transient, May 25.

Blackburnian Warbler—*Dendroica fusca.* A common summer resident, inhabiting the tree-tops in hemlock woods.

Black-throated Green Warbler—*Dendroica virens.* Summer resident. The most abundant and most widely distributed of its family. Found usually among evergreens.

Pine Warbler—*Dendroica v. vigorsi.* A common summer resident. It frequents the upper branches of Norway pines.

Oven-bird—*Seiurus aurocapillus.* A common summer resident, found in hardwood forests.

Water-Thrush—*Seiurus n. noveboracensis.* A summer resident, abundant along the shores of inland lakes.

Mourning Warbler—*Oporornis philadelphia.* A common summer resident, found in low, deciduous growth, near water.

Maryland Yellow-throat—*Geothlypis t. trichas.* Summer resident. Not uncommon in suitable places; for example, the margin of boggy lakes.

Wilson's Warbler—*Wilsonia p. pusilla.* Summer resident, but not common. It frequents alders and bushes in wet places.

Canada Warbler—*Wilsonia canadensis.* A common summer resident which frequents low, thick growth, near water and at the margin of bogs.

Redstart—*Setophaga ruticilla.* A common summer resident, found in second growth, usually near water.

Catbird—*Dumetella carolinensis.* On June 14 a single individual was noted in an old burning, in low growth bordering a stream.

Brown Thrasher—*Toxostoma rufum.* An infrequent summer resident; found in clearings and old burnings.

House Wren—*Troglodytes ae. aedon.* Abundant, and widely distributed over all the area, even to the Huron Islands. It frequents open places.

Winter Wren—*Nannus h. hiemalis.* A common summer resident, in damp woods and near streams.

Long-billed Marsh Wren—*Telmatodytes p. palustris.* A resident colony was found in a sweet-gale thicket, which grew, island-like, in a sphagnum bog.

Brown Creeper—*Certhia familiaris americana.* Summer resident. Usually found in deep woods, in the vicinity of cedar swamps.

Red-breasted Nuthatch—*Sitta canadensis.* A common summer resident, which frequents the Norway and jack pines.

Chickadee—*Penthestes a. atricapillus.* Abundant and generally distributed. On May 25 it was observed feeding full-grown young.

Golden-crowned Kinglet—*Regulus s. satrapa.* A summer resident among jack pines and hemlocks.

Ruby-crowned Kinglet—*Regulus c. calendula.* A transient visitant. It was noted in full song on May 25, but was not observed subsequently.

Wood Thrush—*Hylocichla mustelina.* On June 1 a single bird was noted near a clearing on the Salmon Trout River.

Veery—*Hylocichla f. fuscescens.* Several were heard and seen along the Salmon Trout River, but not elsewhere.

Gray-cheeked Thrush—*Hylocichla a. aliciae.* A transient; noted on May 24, and on a few days following.

Olive-backed Thrush—*Hylocichla ustulata swainsoni.* The most abundant thrush. A summer resident, well-distributed; heard even on the Huron Islands.

Hermit Thrush—*Hylocichla guttata pallasi.* A common summer resident, well-distributed.

Robin—*Planesticus m. migratorius.* Abundant, particularly about dwellings.

Bluebird—*Sialia s. sialis.* Rather rare. Seen only on the jack pine plains.

Sewickley, Pa.

THE WILSON BULLETIN

Published at Sioux City, Iowa, by the Wilson Ornithological Club, with the co-operation of the following societies, viz.:

The Nebraska Ornithologists' Union.
The Iowa Ornithologists' Union.
The Kentucky Ornithological Society.
The Tennessee Ornithological Society.

The subscription price in the United States is $1.50 a year, and 50 cents a number; in all other countries of the International Postal Union the price is $2.00 a year, and 60 cents a number. Subscriptions and orders for single copies should be addressed to the Secretary, Prof. Gordon Wilson, Bowling Green, Kentucky, U. S. A.

EDITORIAL

We desire to make the BULLETIN of the utmost service to its readers. As a magazine it is a medium for ornithological publication; as a Club organ it must serve the needs of the organization and its members.

In recent issues we asked to be notified of all complete (or nearly complete) sets of the WILSON BULLETIN. Very few complete sets have been found or reported. A few persons wrote in to say that they possessed a nearly complete set, and desired to complete it, if possible. Numbers which are out of print can probably be secured only by chance or by advertising, and the latter may be very uncertain. We are not sure that such an advertisement in the WILSON BULLETIN would be worth much, because very few of the old members (of twenty-five and thirty years ago) would now see such an advertisement. However, if there are any considerable number who would like to try it, the WILSON BULLETIN will be willing to carry the advertisement without charge, simply to encourage the completion of files. But all such requests must state precisely three things: what you have, what you want, and your address—one, two, three. If you wish to make an offer, it may be included. The Editor will arrange the announcements. They will all be held until enough accumulate to justify the space.

We have also been thinking of another innovation which should increase the BULLETIN's service. Would a question-box department be of value or interest to our readers? Here, questions on any ornithological subject might be asked by any member. The question would be published, and the membership at large would be invited to supply the answer.

Thirdly, after the publication of the September issue we received a number of requests for extra copies of that number or for reprints of the article on birds of prey by Prof. H. K. Gloyd. One teacher wanted a number of extra copies of that article for use in class work. Others may have wanted it for field use. In order to supply this demand we had a limited number of reprints made, which we propose to distribute at cost. This makes a twenty-page pamphlet giving descriptions and keys for identification of hawks in the field. The price will be five cents each and fifty cents a dozen, with postage extra. We have hoped that we might be of added service to our members in this way.

Without desiring to anticipate the Treasurer's report we may say that it now appears likely that the WILSON BULLETIN will close the current year fully paid up,

and without a deficit. If there is any deficit it can scarcely exceed fifteen or twenty dollars, at most. If the income for 1926 does not shrink, we should be in a position to increase the number of pages, or the number of illustrations, or both. The loss of a number of paying members, or an appreciable reduction in amount of dues paid per member may, however, upset this calculation. In other words, the membership list for 1925 just about carried the cost of publishing the BULLETIN on a sixty-four page basis, with a few illustrations. The special fund which was generously subscribed by the membership early in 1925 was for the special purpose of liquidating accrued deficits. These deficits, which had been carried along from the war period, were liquidated; and the magazine has run through 1925 on its income.

What the BULLETIN shall be in 1926 is to be determined by its readers in a double sense. It will depend upon the financial support, as just intimated. But in a much more vital way the BULLETIN also depends upon its members and readers for its literary support. The readers will get out of it what the readers put into it. The BULLETIN is a "mutual" institution, rather than a "stock" institution, to borrow the terminology of the business world. The Editor can do a good deal to make or to unmake the magazine; but after all, the readers must supply the contents of the pages, and this determines, fundamentally, its success. We are free to say that the editorial work would be much rosier if five or ten times more manuscripts were presented. We are thinking, not of the additional labor to the Editor, but of the greater pleasure and profit to the readers.

With the close of the present year a very pleasant relationship between the Nebraska Ornithologists' Union and the Wilson Ornithological Club will expire. In 1915 a rather close affiliation between the two organizations was consummated. The nature of this connection was such as to make each member of the N. O. U. a voting member in the W. O. C. Primarily to make other disposition of their funds, the N. O. U. now withdraws from the financial arrangement which has hitherto existed. After ten years of mutually happy relationship we release the N. O. U. with gratitude and sincere good will; and we trust that they may continue to remain associated upon the less rigid basis which applies to other state organizations.

The Editor and his family enjoyed a very pleasant two-day visit by Dr. and Mrs. Lynds Jones in the latter part of September, while they were en route to the Pacific coast for the winter. We might have prevailed upon our guests to stay longer, but for the plea that they must get over the mountains before the passes become buried in snow.

As we complete the present volume the Editor wishes to acknowledge the splendid co-operation from every quarter. The genuine loyalty of the membership has been a constant inspiration to the officers. The Editor is under deep obligation to his associates, who have faithfully responded to every call for assistance. We must also acknowledge the cordial co-operation of our printers, who have taken pride in the mechanical work of producing the BULLETIN. In behalf of all the Editor expresses the thanks and appreciation of each to the other.

GENERAL NOTES

Conducted by M. H. Swenk

The Blue-Gray Gnatcatcher at Sioux City, Iowa.—On May 1, 1925, I observed the Blue-gray Gnatcatcher (*Polioptila caerulea caerulea*) in what is known as the Waters Tract adjoining Stone Park on the Big Sioux River. The bird kept pretty well up in the trees, never still more than a second at a time, and continually uttering its faint but varied song. Although it is a rare bird in this region, I have been more or less familiar with the species elsewhere, having found it along the Mississippi River at McGregor, Iowa, while in the summer of 1924 I observed a nesting pair at the Ledges State Park in Boone County.—CHAS. J. SPIKER, *Sioux City, Iowa.*

Occurrence of the Wood Ibis Near Omaha, Nebraska.—On June 29, 1925, I saw a Wood Ibis (*Mycteria americana*) on the Missouri River bottom about one-fourth of a mile south of the Boy Scout Camp in the Fontenelle Forest Wild Life Reserve south of Omaha and about two miles north of Bellevue. It was about forty feet up in a large, partly dead cottonwood tree and the identification was unmistakable. I was so near that I could see every distinguishing mark of the bird—the white plumage, the black primaries and tail feathers, the brownish or bluish black head and upper part of the neck, the long bill curved downward at the end and the bluish gray legs. It was about the size of a Great Blue Heron, but had the habit of settling its neck back into its shoulders much more than the heron is apt to do when standing. With me when I saw it was Mr. H. P. Larson, a farmer living just east of the Boy Scout Camp, who had seen it the night before flying over his house. Mr. Larson has lived on the bottoms for many years but has never seen this kind of bird previously. A few days before I saw the bird it was noted by Mr. G. H. Glendall, chief of the Boy Scouts, but he did not know what it was. This bird was also seen by Dr. Keegan, Dean of the Nebraska School of Medicine, and probably by other observers, during the week it was making the Boy Scout Camp its headquarters. So far as I know it has not been seen since the day I saw it. The bird was not in the least shy. In fact, after Dr. Keegan and I decided that it would be safer at a somewhat greater distance from the road, we tried to make it fly by shouting and waving our hats from the ground, thirty or forty feet from the base of the tree, but it paid no attention to us and went on preening its feathers. The locality in which it was seen was in the center of a wild life reservation of about twenty-five hundred acres, seven miles southeast of the center of Omaha.—H. GIFFORD, *Omaha, Nebr.*

White Herons on the Upper Mississippi River.—On August 11, 1925, from the top of "Pike's Hill", just south of McGregor, Iowa, I saw, through my binoculars, in a lagoon in the Mississippi River, two white birds, which, after long and careful studying, I took to be Egrets (*Casmerodius egretta*).* Two days later, from McGregor Heights, just to the north of McGregor, I saw, through my binoculars, a white bird which I took to be an Egret. All three of these birds

*Dr. Keyes, who also observed these birds, as is above stated by Dr. Weeks, has written the Editor that apparently they had dark colored wing coverts, which indicates the probability that they were immature Little Blue Herons (*Florida caerulea*), rather than Egrets. Dr. Keyes says that they were standing and wading in a slough on the Wisconsin side of the river, to which state the record, therefore, belongs. This and the following note indicate that the unusual north-

were seen by a large number of people attending at The American School of Wild Life, among them Dr. Charles R. Keyes, the adviser on birds for the Audubon Societies of Iowa.—Leroy Titus Weeks, *Tabor, Iowa.*

The Egret in Emmett County, Iowa.—At the present time—September 8, 1925—an Egret (*Casmerodius egretta*) is staying at High Lake in Emmet County, Iowa. I have not seen it but I was told about it by a reliable person who stated that it looked like a white Great Blue Heron, and there could hardly be any mistake about that. I have not seen an Egret since 1911, when there was one at the same lake during the late summer.—B. O. Wolden, *Estherville, Iowa.*

The Egret in the Great Miami Valley, Ohio.—On July 26, 1925, I was agreeably surprised to see two Egrets (*Casmerodius egretta*) winging their way over the artificial lake at the Miami Conservancy Dam at Englewood, Montgomery County, Ohio. They appeared over the south end of the lake, flying at a moderate height; they then circled about, finally approaching within two hundred and fifty yards when, under very favorable light conditions and with the aid of eight-power binoculars, it was possible to distinguish clearly their bright yellow bills, black legs and feet. As a further aid to identification it was possible to compare them with the Great Blue Heron, several of which were seen at the same visit to the lake; and from this comparison I was convinced that these birds were much larger than the Little Blue Heron, so common at this lake in August, 1924. This is my only record of the Egret for Montgomery County, and I am not aware of a state record during the past few years.—Ben J. Blincoe, *Dayton, Ohio.*

May Bird Censuses in Dutchess County, New York, During 1925.—Supplementing my paper on all-day bird censuses, in the Wilson Bulletin for September, 1925, I may state that only two May censuses were made in Dutchess County, New York, during 1925; one on May 10, the southern section being covered by Messrs. Allen Frost, Flewelling and Ray Guernsey, and the northern section by Messrs. Ludlow Griscom, John H. Baker and Maunsell S. Crosby, and the second on May 17, the two groups consisting of Messrs. Allen Frost and George W. Gray in the south and Messrs. Robert C. Murphy, Clifford H. Pangburn, Charles A. Urner and Maunsell S. Crosby in the north.

On May 10 the northern group reached Mt. Riga in the extreme northeastern part of the county before dawn and then worked west and south through Pine Plains, Cruger's Island, Rhinebeck and Hyde Park to Poughkeepsie. The southern group searched the environs of Poughkeepsie, then went south to Mt. Beacon, east through new census territory to the southeast corner of the county, and then north until opposite Poughkeepsie, when it came across to the point of beginning. Swamp River, where the Brown Creeper has bred, and Turkey Hollow, where several northern species remain all summer, were visited in this way. One hundred and seventeen species were recorded altogether, the following being new ones for our census list: Pintail, King Rail (first county record), Duck Hawk (nest found constituting the first county breeding record), Orange-crowned Warbler (first county record), Palm Warbler, Winter Wren and Hermit Thrush.

---

ward movement of Egrets and Little Blue Herons that took place between late June and early September of 1925, extending to the District of Columbia, New Jersey, Pennsylvania, Ohio, New York, New Hampshire and Connecticut (see the *Auk* for October, 1925, pp. 583-585, and *Bird-Lore*, xxvii, pp. 328-329 and 333-340) extended west to southwestern Wisconsin and north-central Iowa.—Ed.

On May 17 the northern group omitted Mt. Riga and began at the Pine Plains, spending part of the afternoon south of Poughkeepsie, while the southern group covered about the same territory as on May 10. The net result was one hundred and twenty-three species, the only new bird to add to the combined censuses being the Coot.—MAUNSELL S. CROSBY, *Rhinebeck, N. Y.*

The Bittern and the Snake.—As I sat under a tree on a bank above Crystal Lake, Nebraska, I was, perhaps, eight feet above the water, which came nearly to the foot of the bank, leaving shallow pools and a few rushes between the bank and the edge of the water. Soon after seating myself, I heard a cry of distress from some animal only a few feet away, but out of sight. I was puzzled at first to tell what it was, but in a minute identified it as the cry I had heard once before when I had watched a snake swallow a frog. As the snake would swallow the hind parts of the frog, the frog would struggle desperately to escape, and would utter this cry of distress.

No sooner had I identified the cry than I discovered an American Bittern coming toward me, and I knew that it, too, had heard the cry. It dropped down behind a small bush growing on the side of the bank, about ten feet from me, and in a minute reappeared, and with it a snake which had swallowed the hind parts of a frog. The bittern held the frog by the neck and well back in its bill, and then the battle began.

The snake, I judged, was a garter snake about two and a half feet long, and, as it had already made good headway with its meal, it apparently had no intention of releasing the frog if it could help it. The bittern braced itself on its feet and pulled, and the snake writhed and coiled and twisted but could not gain an inch. The bittern did not move its feet more than an inch or so in all the struggle, but as the snake coiled in front of it, or straightened or threw itself into a coil at the side of the bittern, the latter only turned its head and kept its hold, pulling by throwing its head back and keeping the snake well in front of it.

I cannot be sure of the length of time that this battle lasted, but think it must have been more than five minutes, when, at last, a jerk of the bittern's head backwards and upwards released the snake's hold upon the frog. Without any further attempt to sieze the frog, the snake slid quietly down into the shallow water.

Then came the preparation of the meal. The frog was, I think, a fully grown one, or at least it was not a small one. As the bittern pulled the frog from the snake's mouth it still held it by the neck, never changing its hold at any time during the battle by even a fraction of an inch. Without releasing the frog, although it must have been pretty well strangled, the bittern "soused" it up and down in a shallow pool of water, doing this at least twenty times, and then stepped back to another pool somewhat hidden from my sight by low rushes. I could see the bittern was still dipping the frog up and down, and when it returned to the first pool, the frog's head and also the upper part of the body with the front legs, had disappeared down the throat of the bittern, but the rest did not go down easily so it began the "sousing" process again, only this time more vigorously than before. I could see that the frog was getting longer and slimmer in the process, and, when it had been stretched out much longer than it was at first, it was finally swallowed.

It seemed rather a large meal for so slender a throat, and the bittern seemed to think so too, for, stretching its neck and head out as far as possible it held

them at an angle of 45 degrees to the body. It then moved back into the rushes where, for a few minutes more, I could see the neck and head in the same position, and then it disappeared altogether. I think that this is one of the most thrilling experiences I have ever had in the study of birds, and wish I might have shared it with others.—Mary L. Bailey, *Sioux City, Iowa.*

Further Notes on the Food of the Loggerhead Shrike.—Since writing the note on the Loggerhead Shrike (*Lanius ludovicianus ludovicianus*) in the Wilson Bulletin for December, 1923, several further instances of their eating other birds have been brought to my attention.

On February 4, 1924, a member of the Ballard Normal School faculty found a Carolina Chickadee impaled on a thorn tree—presumably placed there by a Loggerhead Shrike. On March 10, 1924, a Mercer University student showed me a kinglet which he had found in the same thorn tree as the Carolina Chickadee of February 4. The young man had seen a Loggerhead Shrike eating something hanging from a thorn, had driven the bird away in order to learn what it was eating, then allowed the shrike to return to its meal for a time, when he had driven the bird away a second time and secured the kinglet, the head of which was missing.

One Ballard Normal School student reported seeing a Loggerhead Shrike eating an English Sparrow. These are the only instances of which I know personally of a Loggerhead Shrike eating another bird, within two years. In the late winter and early spring of 1924 food was unusually scarce, owing to a very severe freeze in January. It might be interesting to add that on March 3, 1924, a lizzard was found impaled in a bush where a Loggerhead Shrike had been seen a short while before.

During the milder winter of 1924-25, with grasshoppers and other insect food available, I have no evidence of the Loggerhead Shrike eating small birds. Another fact which makes me doubt that this shrike often eats other birds is that the birds never exhibit any fear of a Loggerhead Shrike, though I have frequently seen them near together.—Beryl T. Mounts, *Ballard Normal School, Macon, Ga.*

Some Experiences with Yellow Warblers.—In 1921, a pair of Yellow Warblers built a nest in a spiraea bush in our yard and raised their young successfully. The nest was unfortunately placed, being unshaded during the heat of the day. The mother bird shaded the young ones with her body and outspread wings when the heat was extreme.

The next year (1922) a pair of Yellow Warblers built in the same bush, but this time the nest was so placed that it was shaded. We suppose these birds were the same ones that built there the year before and that they had profited by their former experience.

Before the eggs hatched, the nest was raided, probably by a Blue Jay that we had seen near the nest. The warblers hunted all about the yard for another site, and finally decided to build among some raspberry canes. They pulled much material from the old nest to use in this second one. The nest was fastened to two separate canes, and was not so carefully nor strongly made as the first one. In due time four eggs were laid and incubation began.

Each day I visited the nest many times to see if it was unmolested. Upon one of these visits, I found that the nest had become unfastened from one of the

raspberry canes, and was so badly tipped that the eggs were in danger of rolling out. With a darning needle and twine I sewed the edge of the nest firmly to the cane from which it had broken loose. While doing this I found a broken Cowbird's egg lying beneath the nest. No doubt the extra weight of the Cowbird had broken the fastening of the nest on one side and the egg had rolled out. Possibly the warblers had pushed it out. Unfortunately, when I sewed the edge of the nest to the cane, I left the bottom unsupported.

The first egg in this nest was laid on June 18, and the last egg hatched on July 2. About this time we had a heavy rain, accompanied by a terrific wind, and on July 8 I found the bottom of the nest had nearly fallen out. The young birds were clinging to the sides. Again I secured a darning needle and some twine, took the little birds out of the nest, mended it as well as I could, and then put them back.

Before this, the parent birds had become quite used to my presence about the nest, but they became so terrified at this procedure that, after this, they were always distressed to have me come near them. The young birds were able to fly in a day or two.

The next year (1923) a pair of Yellow Warblers made a nest in a large rose bush by our porch. It was exceedingly interesting to watch them shape the nest, and press each bit of material into its walls. After two eggs had been laid, some necessary repairs were made upon the porch roof. This disturbed the birds very much. Apparently fearing that their treasures were in danger, they brought two small feathers and laid one over each egg to hide them from view. Later they became so alarmed that they abandoned the nest and the two eggs, building about a rod away in a very small rose bush.

Often in the night we heard cats in the yard, and I feared they might find the nest, so I drove down some iron rods and made a temporary fence of fine mesh wire about the bush. It served to keep the birds safe. One day I found a Cowbird's egg with the warbler eggs. I removed it and the warblers succeeded in raising their four little ones without further misfortune.—Etta M. Morse, *Woonsocket, S. Dak.*

Some Additional Observations Made at My Feeding Station.—My note in the March, 1925, number of the Wilson Bulletin, p. 59, states that the Blue Jay and Evening Grosbeak occurred at my station in about equal numbers during the winter. However, there were some changes as the season progressed. After December the Evening Grosbeaks were seen only in small numbers while the Blue Jays were common birds at the feeding station from the first of the year until after March 26, missing only one day during this whole period. From this date onward they were seen in decreasing numbers and less frequently. From the first of the year to March 26 (1925), the Evening Grosbeaks were noted on only fifteen dates, and usually not more than four at a time, but on April 3 ten were seen.

I have also made one more observation on the Hairy Woodpecker's appetite for ants. On January 10, 1925, I placed a quantity of black ants, which I had gathered a few days before from a fallen tree trunk, on a block of wood at my feeding station. At rather close range I watched a female Hairy Woodpecker at her first visit to the feeding tray that morning, and I was able to observe her eat seventy-eight of these black ants.—O. M. Bryens, *Constantine, Mich.*

House Wrens and Arsenate-dusted Currant Bushes.—For three successive years the House Wrens have abandoned their nests in the writer's yard when their young were partly grown. The dried remains of the nestlings were found when the nest boxes received a cleaning in the fall. At the time that the nests were abandoned the currant bushes had become infested with the small green currant worms and had been dusted with finely powdered arsenate of lead. It was shortly after the old birds were observed carrying the arsenate-covered worms to their nests that they disappeared and were not seen again. No other birds were seen feeding on these worms. As there is nothing conclusive in these notes, it would be interesting for those observers who note any sudden decrease in the House Wren population to also make a comparison with arsenate-dusted bushes, if any, to which the birds have access.

The writer has not observed any of the so-called bad habits of the House Wren, the only instance of nest robbing noted being when a Song Sparrow's egg was found on the sidewalk directly after a Cowbird had flown over the same spot. The Song Sparrow's nest was not found, but later a much harassed Song Sparrow was followed about the yard by a young Cowbird twice its size. (Banded with numbers 149536 and 262630).—E. C. Hoffman, *Lakewood, Ohio.*

A Marauding Blue Jay.—On the afternoon of May 11, 1925, while sitting out on the lawn of the Sioux City Boat Club, idly gazing up in the tree tops, I saw a Blue Jay harassing a Mourning Dove, eighteen or twenty feet up in a tree. He would pluck out a mouthful of feathers and then retreat for a moment. When the dove had settled down, back would come the jay to torment her again. On closer observation I discovered the nest, wonderfully well hidden for a Mourning Dove's nest. The jay kept up his attacks for several minutes and finally the dove left the nest and went to her mate sitting on a limb farther out. This was just the opportunity the jay was waiting for. He hopped to the nest, pecked a hole in the egg and carried it off. Excepting once or twice, the male dove did not come to the defense of his mate.—Mrs. Marie Dales, *Sioux City, Iowa.*

An Observation on the Behavior of the Chimney Swift Under Unusual Circumstances.—A large flock of the Chimney Swift (*Chaetura pelagica*), gathering for the fall migration, roosted in the brick stack of the Lincoln School in Atlantic, Iowa, from approximately September 12 to 22, 1925. The flock left the stack after the air warmed in the morning usually about 7:30 to 8:30 A. M., depending upon the temperature and sunshine, and began to re-assemble over the stack about 6:00 to 6:30 P. M., coming from all directions, by ones and twos and threes, until the air over the building was full of the twittering little birds. It would be difficult to estimate the exact number, but probably at least one thousand birds were present for several evenings. Owing to the fine fall weather, and also to repairs to the heating system, firing of the boilers was not begun until the afternoon of September 22. This was a cool, cloudy day, and the flock of swifts assembled earlier than usual. The procedure of going to roost was the formation of a great ellipse of birds, inclined at an angle of about 45 degrees, the lower edge being on a level with the top of the stack. A rapid rotation of the birds in the ellipse would go on for perhaps half an hour, when one or two would drop in, others following, and this would continue faster and faster, until the whole line of birds had passed into the stack. On the last evening, the whirl went on

through the smoke and gas arising from the stack, and, when the first few attempted to descend, they were of course immediately driven back by the upward current and the lack of air. Others tried, but none could descend, and soon agitation and uncertainty was plainly diffused through the whole flock. The twittering was loud and incessant, and the birds bunched together, passing over the stack so that their wings could be plainly heard striking together. The ellipse became a dense mass of struggling birds, but none could stay in the stack. The flock wheeled away from the building, only to return in the gathering twilight, uncertain where to go. Finally, a solitary bird returned from the west, with loud calls, and a considerable portion of the flock joined it, and passed westward out of sight. The remaining birds desperately circled the stack for some minutes longer, but soon broke up and also disappeared, when it was almost dark. The next evening a few again appeared over the stack, but could not enter for the smoke, and after that the great flock was seen no more.—T. H. WHITNEY, *Atlantic, Iowa.*

The Prothonotary Warbler at North Bristol, Trumbull County, Ohio.—On May 12, 1925, a pair of the Prothonotary Warbler (*Protontaria citrea*) began a four days' visit about our yard, this being the first appearance of the species in this locality. Our yard is the upper slope on Norton's ravine—an open, sunny, swampy ravine through which flows a brook fed by springs. The male warbler seemed very much taken with this environment, and, singing madly, he explored over and over again every nook and corner of the place, even flying onto the screen door and also examining the porch lighting fixture. He finally singled out a tin can hanging against the house near the back door, and began, on the second day to carry into it small quantities of dead leaves and rootlets, some of which he picked up on the lawn within ten feet of my chair. At times he stood on the can and sang vigorously, then flew into the can and sang again.

Early on the morning of the second day, the male bird dashed down to the brook for a hasty bath. At this moment the female warbler made her first appearance. Interrupting her mate's toilet, she led him away in a merry chase. The female was very shy about the house, appearing only as an occasional gleaner among the apple blossoms, and keeping well up in the tops of the trees. She showed no such enthusiasm for her surroundings as did her mate, and if she approached his tin can I failed to see her.

The male warbler was extremely tame at first, paying almost no attention to us as we trailed him about the place, only stopping occasionally to give us a sharp scrutinizing look, much after the manner of the Maryland Yellowthroat. On the third doy, he wandered a block away to the center of the village, and was identified by Hilda Robinson. He still returned at intervals to his tin can and carried in a little more material, but it was easy to see that his ardor had cooled. My last sight of the pair was towards the evening of the fourth day, when both of the warblers were observed on the ground near the back door confronted by a House Wren. Upon my approach they made their final departure.

The wrens had resented the presence of the warblers and had attempted to chase the male on several occasions, but the chief clerk held his ground. However, some of the nesting material disappeared from the can, and after the departure of the warblers I saw the wren enter the can and throw out some of the material. Can it be that the loss of such interesting tenants was due to the infringements of the wren?—MARCIA B. CLAY, *North Bristol, Ohio.*

The Great Blue Heron in Delaware County, Ohio.—Heronries are becoming rare and far between in central Ohio. With the cutting of timber and drainage of marshy land, their nesting associations and feeding grounds are destroyed, and they must move to other sections. The largest colony of the Great Blue Heron (*Ardea herodias herodias*) of which we have knowledge at present is located eight miles north of Delaware. This colony is located in a large, marshy tract of original and second-growth timber, and about mid-way between the Olentangy and Scioto Rivers.

We found the colony on June 7, 1914. There were forty-nve nests occupied that year, and a number of nests that were not in use. A farmer living near the tract, said they had been nesting there for more than fifty years. We have visited the colony every June since 1914, and occasionally at other times, and find the colony is slowly diminishing in numbers. In June, 1923, there were thirty-five nests occupied. Their feeding grounds are being restricted every year by the drainage of marshy land, and while the rivers are but seven miles apart, the fishing is but a fraction of what it was in earlier years.

An examination under the nest trees showed the remains of thousands of crayfish. The under covering or skin seemed to be the indigestible part of these crustacea. Several large vertebrae of fish were found that had been picked clean of flesh. We have noted the herons carrying large fish in their bills, but have never been near the nest to see what disposition was made of them. Are they for the benefit of their incubating mates? I have found birds from this colony feeding twenty miles away from their nests, and as it must use much of their vital energy to carry supplies that far—a forty mile trip—can we wonder at their leaving our state?

On June 21, 1916, we found a small colony of fine nests in Alum Creek. This colony is probably the remnant of a large colony that nested in the vicinity in past years. It is about six miles northeast of the large colony and the nests were in a large beech tree. In the large colony the nests are in the tallest trees, and nests were found in Bur Oak, Pine Oak, Red Oak, Red Maple, White Ash and Cottonwood. One Bur Oak had nine occupied nests and one White Ash had six nests in 1916.—Chas. R. Wallace, *Delaware, Ohio.*

Three Bird Records from Crystal Lake, Hancock County, Iowa.—While on a visit at Crystal Lake, Hancock County, Iowa, during September, 1925, three bird records of interest to Iowa bird students were made. A Caspian Tern (*Sterna caspia imperator*) was noted first on September 15, and again on September 16, flying over Crystal Lake. This was a lone bird, although several times it was associated with a flock of Black Terns, which remained about the lake during my entire stay. A pair of Wood Ducks (*Aix sponsa*) was noted on several occasions, the last time on September 16, about the outlet to Crystal Lake, where a few large willow trees were growing. When first observed the male was sitting in one of these willows beside the country road which crosses the outlet at that point. A single individual of the Olive-sided Flycatcher (*Nuttallornis borealis*) was seen on September 16, in a little grove beside the lake. Attention was first attracted to this bird by the familiar call note. This bird was collected, but was so badly shot up that it was impossible to make a skin of it.—Ira N. Gabrielson, *Portland, Oregon.*

Leconte's Sparrow at Nashville, Tennessee.—Records of the occurrence of Leconte's Sparrow (*Passerherbulus lecontei*) in the south have so seldom been published that the following should be of interest. On November 12, 1916, near Nashville, I was so fortunate as to be able to make the first Tennessee record for this species. While traversing a damp, weedy patch in an old field a faint "chip" was detected in the grass ahead. The bird was flushed close at hand a few moments later, and made a flight of about forty feet, dropping into the grass. Stalking carefully to within twelve feet it was observed running and hiding among the grass and weeds. Seeing that it was a new sparrow to me I decided to take it with my small collecting gun, but found it difficult to keep in sight of the bird and at the same time far enough away to avoid damaging the specimen. At length, for fear of losing it entirely, I took it at twenty feet and got a rather poor specimen as a result. Careful search revealed no others at this time, and since then many another piece of damp grass and weed has been plodded through in the hope of finding a second specimen of Leconte's, or a Henslow's, or a Nelson's Sparrow, but without success.

A second record of Leconte's Sparrow has just been made, with observations so satisfactory that I wish to make them known with the hope that the details given may encourage others to search for and identify this seldom seen bird. On October 24, 1925, in company with a group of fellow bird students, I identified one of these birds beyond question. It was found in an extensive hay field in the bottoms of Stone River, ten miles east of Nashville. The grass was fairly thick, six to twelve inches high, and long grass, weed fields, and damp areas were near at hand. The bird was first flushed at ten feet, flew thirty feet, dropped into the grass, then ran rapidly ahead. As we approached it was observed to run, with head down, a few feet, then stop to look at us. We flushed it perhaps ten times, each time getting closer, until finally it allowed us to calmly inspect it as long as we cared to at a distance of eight or nine feet. The flights each time were twenty-five to thirty feet, and the bird always alighted on the ground. Its short tail was very noticeable, reminding me of the Grasshopper Sparrow, but the bird was not so heavy. The yellowish cast of the head and neck, the buffy head lines including the median head stripe, and the ashy nape, were all conspicuous, and served to separate it nicely from other sparrows of similar size and habits. Our field identification was checked up a few hours later by the examination of skins in my collection of this and closely related species.

An interesting observation was the fact that after we had flushed it a number of times it became loathe to leave the ground and frequently turned sideways to regard us with a curiosity that appeared equal to ours.—Albert F. Ganier, *Nashville, Tenn.*

We invite our readers to submit more freely material for this department.—Ed.

BIRD BANDING NEWS

Conducted by Wm. I. Lyon

BANDING DUCKS AT SCOBEY LAKE, MISSOURI

BY T. E. MUSSELMAN

Ever since my memorable spring of bird banding on Mr. Baldwin's plantation at Thomasville, Georgia, sportsmen have brought me occasional aluminum bands taken from ducks which have been shot along the Mississippi River. In every case I have written to the Biological Survey at Washington and they have always sent back interesting records of when the duck was banded, and by whom. This information I in turn have given to the hunters. It was so fascinating that

One leaf of a clover trap. Three Mallards are in the air and a dozen are on the water wondering what it's all about. Notice slender iron rods used to keep up the side netting.

I decided that the banding of ducks must be added to my bird banding activities.

As though it were in answer to my mental wish, Mr. Neal Monroe, a widely known hunter and sportsman of Quincy, approached me during the early spring of 1924 and asked why we could not maintain a spring duck banding station at his lodge, located at Scobey Lake, on the Charitan River, eighteen miles north of Kirksville, Mo. Immediate preparations were made, plans for duck traps and other information were received from the Biological Survey, and on March 9, after traveling nine miles in a rickety old buggy through country roads hub deep in mud, we finally arrived at the cabin.

The lake is fifty or sixty acres in area bordered by a similar acreage of swamp heavily grown with smart weeds, reeds, lilies, and other vegetable food

generally acceptable to wild fowl. An old decoy pen was quickly converted into a duck trap. A large "V" of chicken wire led to the entrance which was guarded by a drop gate released by wire from a blind some fifty yards away. Much corn and some live duck decoys were distributed about the trap, but I cannot say that our first year of duck trapping was very successful. We caught some Mallards, a few Black Ducks, and several Pintails. However our mediocre success was due to several things which the average amateur must try hard to avoid. First, the trap was too large, which made it almost impossible to catch the ducks once they were inside. Second, the side walls of chicken wire were not pegged down securely enough, so that nearly one-half of the first catch of fifteen or twenty birds escaped under the netting. Third, it was necessary for us to sit constantly in the blind in order to catch our birds, and once a few had been trapped, others could not enter the door until the birds within had been captured and the trap reset. Fourth, rain every day kept the corn fields filled with little puddles to which the ducks travelled, returning only at night to rest and feed on the lake and in the reeds. I might say that we secured more practical experience than ducks in the six days of that eventful week.

The installation of a radio in the club house gave us information concerning the weather conditions and also furnished amusement and entertainment during the evening hours.

On March 20, 1925, the second annual expedition started operating at Scobey, a week later however than in 1924. The first trap was shaped like a three-leaf clover, and was located across the lake in a small swampy bayou surrounded by four or five small willow trees. The entrance was constructed at the junction of two of the clover leaves of the trap, and was built by running two iron rods through the mesh of the wire down into the mud, leaving an entrance hole about eight inches across. The flexible ends of the wire netting extended four or five inches beyond the thin iron uprights. These loose pieces opened very easily to the ducks seeking entrance but tended to close as they came against them from the opposite sides in seeking an outlet. A three-foot strand of chicken wire about thirty feet long was stretched directly up to the entrance, thus causing the ducks to swim towards the trap in hunting the abundant food supply which was scattered in the mud and water about the trap entrance. Several decoys were staked out in front of the trap and one-half dozen hen Mallard decoys were released within.

Trap number two was a heart-shaped trap and was located at the opposite end of the lake among some large willow trees where the smart weed was very dense. A muskrat had dug a path six feet wide through this growth and had a good-sized pond about its house. We put our trap around the muskrat home which served as a resting place for our decoys and the clear water gave us ample room within for any wild birds which might be captured.

The third trap was a heart-shaped trap and was placed on a shoal in the middle of the lake. Long wire leaders ran well out into the water and rushes. The purpose of this trap was to catch scaup ducks and mud hens. All these traps were promptly set and heavily baited.

In 1924 from five to ten thousand ducks were using the different lakes in this vicinity. In 1925 probably not more than two thousand were present so that we did not expect a very large catch. Imagine our surprise and pleasure on the

first morning in trap No. 1 to find no fewer than twenty-five birds, our catch being largely Mallard drakes. About six or eight of these birds escaped by finding holes which our first day's haste had not discovered. The trap was repaired and rebaited and we went to the second one where we found a male Canvas-back and a drake Mallard. In the trap in the middle of the lake we saw two dark ducks struggling to escape. Both dived as we approached. When captured they proved to be a female Scaup Duck and a male Baldpate. Such was the start of the most enjoyable week of banding I have ever experienced.

South winds brought in many flocks of smaller ducks which increased our catch of Bluebills and teal. The capturing of an entire flock of Green-winged Teal was interesting. These little fellows were put in a burlap lined crate with a slat top. Imagine the helpless surprise of the two operators when they

One of my collecting cages, with burlap top. and several Mallards ready for banding. The writer is banding a duck. Notice that the duck's head is held between the knees. I don't advise bare arms as the ducks struggle to escape and in so doing scratch the arms badly. As the water is icy and the operator is exposed several hours daily it is well to have a big bottle of skin lotion to soothe the chapped surfaces. Immediately after banding and recording of the duck the bird is liberated.

looked from the inside of the duck trap, to see teal crawling through slats in the top of one of our crates which was located in our flat boat outside the netting of the trap. Some of the little fellows escaped, but a good portion of them were banded before they finally took to the air.

After the ducks once found food about these traps, string after string would drop in to get the luscious corn. They would circle over while we were changing decoys and putting out bait, showing very little fear. The Canvas-back was caught several times at trap No. 2, while one hen and a drake Mallard repeated in trap No. 1.

After the first day, practically no ducks escaped through the traps. We cut many four-foot saplings on which we nailed ten-penny nails at an angle. These were pushed down into the mud, the nail over-lapping the guide wire at the lower edge of the netting.

It was with regret that we had to leave the station just as the Wood Ducks and Blue-winged Teal were beginning to appear but we hope to extend our trapping long enough in 1926 to catch a large number of these. Our 1925 work was a great success; the first return came when the Survey sent word that hen Mallard No. 300550 had been accidentally caught in a rat trap at Shell Lake, Saskatchewan, Canada, by Mr. Arnold Somner on April 24, 1925. In 1926 we shall start earlier, as in this vicinity the week of March 12 to 20 should mark the height of migration of the larger ducks.

To anyone who expects to band ducks, I would advise that you follow the government descriptions and specifications for the heart-shaped trap. Once at the swamp, first find where the ducks are feeding. Bait for several days if possible before actual trapping is attempted. If possible secure a rubber wading suit (trout fishing suit) which extends up to your shoulders. Over this wear some water-proof coat. This will prevent your getting wet when, in the eagerness of capturing a duck, you slip and fall. Scaup Ducks and Coots are particularly hard to catch even when cornered in one of the "leaves of the clover". I shall use a heavy dip net in 1926 which will prevent many a wet arm in the chilling water and assure a quick capture of the bird.

The following additional details for making a clover-leaf trap may be inserted here. The clover-leaf trap is almost identical with the heart-shaped trap described in the Government Bulletin. I first used it because it fitted a small swampy inlet which mallards were using, and I found that having the additional corners in which the ducks could congregate made their escape more difficult, and their catch easier. Select any small inlet off a swampy lake, preferably where there are willow trees which can be bent over. I struck four sticks into the mud in the form of a square, probably four feet apart. Out from these I placed several other poles which I pounded into the mud, forming a crude four-leaf clover. Around these posts I stretched common chicken netting, the strands being about four feet in height. This wire must extend into the mud as all varieties of ducks will dive and swim under water when they find they cannot escape through the air. I found it necessary to cut about thirty saplings three feet long and an inch in diameter, half way up in which I drove a nail at an angle. These I pushed into the mud letting the nail overlap the bottom strand of wire, thus forcing the wire far down into the mud. No matter how severe the attack of a dozen or more wild ducks, they are unable to force an opening below. One may build the trap around a small willow tree, pull down the limbs, and stretch the top netting over the branches. After this, I bind the edges of the top netting to the side netting with flexible wire, thus preventing the ducks which fly from forcing their way out at this junction. The entrance to the trap is made between two of the "leaves" of the trap, where I leave an opening about eight inches wide. This is made by weaving two six-foot iron rods, about the diameter of a finger, through the ends of the chicken wiring and these are forced down into the mud. I allowed about five or six inches of wire to extend inward. This is very flexible and does not keep the ducks from swimming in. But once they are on the inside

and while trying to escape by swimming around the edges, the duck's weight causes the entrance to be closed until the duck is past, when it springs back to its original position. Scatter feed in front of the trap for several days before actually closing the entrance. Leave decoys out with the feed for a day or two until the wild ducks learn to come there for food. On the day when one is actually ready to begin operations stretch a strand of chicken netting from well out into the water directly up to within a foot or two of the mouth of the trap. Scatter feed heavily along this strand of netting and release four or five hen decoys inside the trap. A string of two or three decoys outside is also valuable for the first day or two. I always nail a board to a large stick and force this into the mud inside the trap until the board is just above the water. This affords my decoys a platform on which to rest and dry. I scatter a bucket of shelled corn at each trap morning and evening, and it is an unusual thing to go to a trap without finding from five to twenty ducks within. For the 1926 season I advise the week of March 9 to 17 for the big flight of Mallards, Black Ducks, and Pintails. The following week will supply fewer Mallards, with additional Bluebills, Green-winged Teal, and a variety of other small ducks, to say nothing of the multitude of Coots. By carefully following this description I believe anyone who is willing to put the effort into the work, and who has a location that is used by spring migratory ducks can be of fine service to the Biological Survey.

Altogether we banded 122 ducks. This number included one hundred and five Mallards; six Green-winged Teal; five Scaups; two Black Ducks; and one each of Pintail, Canvas-back, Baldpate, and Coot.

You will undoubtedly be like the hunter who dropped in on me just last spring. When he saw a trap filled with flapping, quacking ducks and was allowed to get inside to capture them, he saw the Mallards dive and while trying to capture them he sat down in the cold water and mud only to come up with two fine birds under his arms. He exploded, "Golly, hunting hasn't anything on this." If you once get started, I can assure you that you will find it as interesting as the actual shooting itself. I expect to band ducks every spring as long as I live and I believe those men who were associated with me, have come to a similar determination. If you are in a part of the country where it is possible to band ducks, I want to encourage your starting this sport next spring as it will furnish you with one of the best of modern day entertainments.

Quincy, Illinois.

MISCELLANEOUS NOTES

Mystery Bands Numbers 1 and 2—Season 1925.—During the course of each shooting season the Biological Survey usually receives a few reports of ducks and other birds carrying bands of unknown origin. It is believed that most of these birds have escaped either from a game farm or from a gun club where they have been kept as decoys. There is always the possibility that if the full facts were known, the record might be of service in a possible application to problems of migration that are being studied. It therefore seems desirable to report each such case in ornithological and sporting journals in the hope that the person who attached the band will write to the Bureau and supply the date and place of banding.

The first case of this nature reported during the present season was addressed to Mr. S. Prentiss Baldwin, at Cleveland, Ohio, and forwarded by him to the Biological Survey. The letter states that a duck bearing a band marked B 3776 NURP was shot at Quill Lake, Saskatchewan, during the spring of 1925.

The second case relates to a Blue-winged Teal killed on Fox Lake near Waukegan, Illinois, on October 24, 1924 (reported under date of October 22, 1925.) This bird carried a band inscribed (20) AM-6827.

It will be appreciated if anyone having knowledge of the origin of these bands will communicate with the Biological Survey.—FREDERICK C. LINCOLN, *Biological Survey, Washington, D. C.*

THE TRAP HABIT.—A Song Sparrow with the trap habit highly developed has been an interesting feature at the Tanager Hill Station (Minneapolis) this year. This sparrow was banded August 19, 1923, with band No. 77800, and was not seen again that year. In 1924 he returned on July 25, and repeated once that day, and once on the 26th, 27th, and 29th, when he disappeared.

On April 14, 1925, he returned again. He repeated on the 16th, and from that date until the end of the month was in the traps fifty-five times, averaging over three times a day. In May he kept up this average repeating 106 times. During the first four days in June he was in the traps fourteen times. His failure to appear again in June led us to believe that he had met with disaster, but on July 8 he was back again, still an addict to the trap habit; for during ten days he was trapped forty-seven times. On the 17th we carried him half a mile from the Station and released him, but in twenty minutes he was back in the trap from which he was taken. On the 18th he repeated six times and on the 19th twice, when we carried him off again; this time increasing the distance to two miles.

This is the last we have seen of 77800, the record breaker for the year, having been released from the traps 220 times between April 16 and July 19.—MRS. MARIE A. COMMONS, *Minneapolis, Minn.*

A HUMMINGBIRD IN THE TRAP.—September 24, 1925, produced an unusual thrill in the bird banding events, when a Ruby-throated Hummingbird was discovered in a new trap. This trap had been made in the shape of a heart, using one-half inch square mesh netting on the sides and three-fourth inch woven netting on the top and bottom. There didn't seem to be a possible chance to capture it, as it appeared that it could easily fly through the three-fourth inch mesh on the top, if not the half-inch mesh on the sides. By watching it closely, it was noticed that it could not grasp the upper wires and climb through. In other words its wings were made for straight-forward work and the feet not for upside down climbing, and he apparently could not escape even through such a large mesh. The trap had ben baited with ripe pears in an effort to catch thrushes, and the pears had attracted the Hummingbird.

After considerable maneuvering the trap was turned upside down, the door then being at the top, and the Hummingbird was chased into an old cage that was nearby and the cage was closed with a hat and rushed to the house. It was necessary to file a number one band down until it was just barely possible to read the number and address, reducing it to the lowest possible limit. Then it was twice as large as needed; but by lapping it and flattening it out a little it was placed upon the tiny leg so it did not pinch and could not come off, and

when it was released it flew quickly out of sight. At the time the creature flew away the thought arose in regard to the weight of the band, as these little birds are said to cross the Gulf of Mexico in a single flight; and the question arose whether even the tiny amount of weight that the aluminum band would add would prove too much to be carried such a great distance. We hope not. We hope that it will be found somewhere in the winter home, and then return again to us another year. The thrill of having really trapped and banded a Hummingbird will remain long in our memories.—W. I. L.

Record Work.—M. J. Magee, Sault Ste. Marie, Michigan, has what we believe to be the world's record in handling a single species of bird. He began trapping the Purple Finch in 1921, getting nine that season. In 1922 he banded two hundred and fifty-four; in 1923, one thousand and ninety-two; in 1924, one thousand and forty-three; and in 1925, to November 1, he has trapped one thousand five hundred and nine, making a grand total of three thousand nine hundred and seven Purple Finches. This, we are sure, is the largest total of systematic trapping of one species on record. All of this work is done within practically fifty feet of his dining room window, under some apple trees that are in the yard. There is a pipe of running water, and feed, always present under the apple trees that are near the house. The results of the fruit, and these trees bear, is positive proof of the value of the Purple Finch. Out of the sixteen bushels of apples, from two trees, there were but three wormy ones, which shows that the birds have well repaid for the food that has been given to them.

Dr. K. Christofferson, Sault Ste. Marie, Michigan, deserves a great deal of credit for the careful work of catching and banding the Spotted Sandpipeers on the Sault River. He has a record of having banded seventy-seven young sandpipers this year, besides many other birds.—W. I. L.

Fractured Bones of Birds Are Protected by Nature.—On November 4, 1925, a Hermit Thrush was trapped, which was quite a little behind the regular migration schedule at Waukegan, Illinois. On examining the bird, it was observed that the right leg had been broken just above the foot. Apparently the blood from the wound had stuck onto the feathers while the bird was resting on the ground to ease the foot, and had dried in that position thus holding the foot against the body and forming a natural splint. The leg had healed and even though it was slightly bent, it was again ready for use.

While bird-banding, we have discovered a number of healed fractures showing that birds have a way of caring for themselves in a case of emergency; and there is a good possibility that the blood on the feathers has formed many natural splints.—W. I. L.

During 1924, I was surprised to see a peculiar looking fly traveling at a high rate of speed through the feathers of a White-throated Sparrow. I captured the fly and gave it a slight pinch to kill it, and upon opening my finger it flew away. On a second White-throated Sparrow I discovered another. This time I pinched it very hard, and again upon opening my hand found that I had not injured it in the least, and it flew away as soon as released. A little later I captured one in a bottle. I believe there were, all told, about eight or ten of this fly-louse observed on the White-throated Sparrow in 1924. So far this year there have been seven observed. I have made a careful search of the feathers of all other birds

without being able to find a similar insect on any species except the White-throated Sparrow.—W. I. L.

The trappers who live in the north, where the ground freezes should be careful to select ground that has a little slope for a trap position, so that it will drain readily in the thawing season in the spring. If there is only a slight slope, it is well to trench all around the trap so as to keep the trap dry.

During the winter months, it has been found that an extra amount of sunflower seed is very beneficial in the bait.—W. I. L.

On July 13, 1924, at Waukegan, Ill., a Woodpecker was noticed working along some large trees. It suddenly flew out and caught a white butterfly, but before it could get to its perch, a Wood Pewee dashed up and took it away from the Woodpecker, while it was in the air. The Woodpecker returned to its former perch and screeched loudly but did not follow the smaller bird which had robbed it.—W. I. L.

Mr. Lyon writes to the Editor that on November 1 he banded his 2500th bird for the current year; it makes his grand total over 9000.

NOTICE

These traps are operated in co-operation with the Biological Survey, U. S. Department of Agriculture. The birds caught are marked with aluminum bands and are released unharmed. All persons are requested not to interfere with equipment of this Station.

U. S. BIOLOGICAL SURVEY.

The notice printed above is copied from the U. S. Biological Survey's *Bird Banding Notes*, No. 16, October 13, 1925. THE WILSON BULLETIN has arranged with its printers to make this notice available to bird banders as a printed placard, about 11x14 inches. These placards are made of a good quality of cardboard, and are given an albumen coating to make them semi-waterproof. They will be furnished at 27 cents each, and $1.40 per six, postpaid. All orders should be addressed to

VERSTEGEN PRINTING CO., *Sioux City, Iowa.*

Cash must accompany all orders, since the item is too small for an account.

If our workers will assist us we will be glad to devote this department now and then to special bird groups. For instance, we may devote an early issue to the banding work on the gulls and terns; another issue to reports on the Chimney Swift. If you have done anything with either of these groups, please send your material in for publication. We want especially to know about the methods used. We would be glad to have either one of these groups ready for the next March issue.—Ed.

NOTES HERE AND THERE

Conducted by the Secretary

The Forty-third Stated Meeting of The American Ornithologists' Union met in New York City, November 10-12, 1925. All the public meetings were held in the halls of the American Museum of Natural History. The Union's headquarters was the Sherman Square Hotel.

One of the most attractive features in the *Nashville Banner* is the column called "Furs, Fins, and Feathers", conducted by Mr. R. A. Wilson. Mr. Wilson has a keen feeling of delight in all things of the out-of-doors and pleases a host of readers each week with his interpretations of nature. No one did more to inform the Southern people of our last meeting than did this fine sportsman and naturalist.

The Louis Fritz Farm of 70 acres in Kenton County, back of the city of Covington, Kentucky, was dedicated May 30, 1925, as a bird preserve and wild life refuge. It was turned over to the custodianship of the game warden, Charles W. Sacles.

The Stratford Company of Boston, Massachusetts, has published recently *America's Greatest Garden*, by Ernest H. Wilson. It is an engaging account of Arnold Arboretum of Harvard University.

We make the following extract from a letter from Dr. Jones after his summer trip to the Pacific coast and back: "I did not find it possible to do more than casual work with the birds on the trip out, and even less on the way back. I did get six cases of parallel-flying birds, and found that their speed of flight was between twenty-five and thirty miles an hour. One Mourning Dove was going at the rate of thirty-two miles for a short distance, but he seemed to be scared. I also kept track of dead birds on the road, and found that they were so few as to be almost negligible in number when the English Sparrows were taken out. Fully 75 percent of these birds were English Sparrows. Of other animals the house cat was easily first. In the south, on the way home, calves and pigs appeared occasionally as casualties. Of course there were some dogs. But mine was the rear car, and as such had to keep constantly on the lookout for the rest of the train, so that watching the road for dead animals was incidental."

Dr. Jones returned to the Pacific coast in September, and will spend the winter at various points in the west.

Dr. C. I. Reed has accepted the position of associate professor of physiology in Baylor University Medical School, Dallas, Texas.

On page 60 of this volumee (March issue) it is stated that Mr. W. A. Strong, of California, found there a nest of the Sennett's Warbler. This is an obvious, and now unexplainable, error. Mr. Strong writes us that the nest in question should have been attributed to the California Linnet, or House Finch (*Carpodacus mexicanus frontalis*).

The N. O. U. News Letter No. 9 states that Professor M. H. Swenk, Secretary-Treasurer of the N. O. U., will broadcast five talks from the University of Nebraska studio KFAB, from 8:05 to 8:17 on the evenings of January 13, February 10, March 10, April 7, and May 5. These talks will deal with the naturalist out-of-doors, each one pertaining to its respective month; they will, doubtless, deal largely with the bird life. All are invited to "listen in".

The K. O. S. issues a quarterly four-page leaflet called "*The Kentucky Warbler.*" The N. O. U. issues a monthly mimeographed "*Letter of Information.*" The I. O. U. issues an occasional mimeographed news letter. We would be glad to learn of similar society communications. Interesting and valuable information is often stowed away in these informal communiques.

"A movement to create a preserve for wild life in the Florida Everglades," says the *Washington Post*, "is attracting the support of sportsmen, naturalists, bird lovers, and others. Mrs. J. M. Wilson, Jr., of Kissimee, Florida, who succeeded in securing legislative action setting apart 100,000 acres in the Everglades for the Seminole Indians, is chief sponsor of the movement for the creation of a sanctuary for birds and game. . . . As the migration of birds is studied, it is found that Florida is the chief home and breeding ground of scores of varieties of birds which are found at different seasons from the Arctic Circle to the equator."

The new Dix River power plant ought to cause a change in bird life in that locality. The dam is located near High Bridge, Kentucky, and has just been completed. The dam is 270 feet high, forming a veritable inland sea. Bird students of central Kentucky are eagerly awaiting developments in bird life there.

California is interested profoundly in Migratory Bird Refuge Bill, House Resolution 745, which will be reintroduced in the next Congress. Bird lovers there, as in many other states, feel that the time has come for a concerted action to prevent many species of birds becoming extinct from unrestricted hunting.—*Christian Science Monitor*, October 12, 1925.

Mr. Frank W. Commons, of Minneapolis, is President of the Columbia Elevator Company, of that city, and not Secretary of the Minneapolis Chamber of Commerce, as we stated in our last issue.

An encyclopedic work entitled "Naturalist's Guide to the Americas," has just been issued by The Williams and Wilkins Company of Baltimore, Maryland. Each section of America is represented by some scholar who knows most of his native region or the region he has made a specialty of. A brief glance at the table of contents shows that several of our members have contributed articles: S. S. Visher, Dr. Lynds Jones, George T. Jones, W. Elmer Ekblaw, Zeno P. Metcalf, A. H. Howell, R. H. Wolcott, and others.

Leonard W. Wing has raised his membership as a contribution to the Better Bulletin Club. I trust that I have left out no name of contributors. The response was fine in every way, and the original debt was wiped out.

The Naturalists' Directory, published annually by Samuel F. Cassino, Salem, Massachusetts, is a book every naturalist ought to have access to. It lists many of our members, giving their official positions, titles, and specialties.

MORE WHO'S WHO

T. E. Musselman is the vice-president of a business college in Quincy, Illinois.

Gayle B. Pickwell is instructor in Zoology, Northwestern University, Evanston, Illinois.

Frank Smith is professor of Zoology, University of Illinois, Urbana.

Carl Fritz Henning is custodian of the Ledges State Park, Boone, Iowa.

Homer R. Dill is director of Vertebrate Exhibits, University of Iowa, Iowa City.

Howard Kay Gloyd is professor of Zoology, Ottawa University, Ottawa, Kansas.

MICHIGAN.

Dr. Alexander W. Blain is a physician of Detroit and one of the organizers of The Michigan Audubon Society.

Mrs. Clark Gleason is a prominent social worker of Grand Rapids.

M. J. Magee is president of the Sault Ste. Marie Savings Bank. He has a bird sanctuary and a banding station, which are the pride of Soo.

A. D. Tinker is a merchant in Ann Arbor.

Oscar M. Bryens is a farmer-naturalist of Constantine.

Edward R. Ford is a publisher of Grand Rapids.

T. L. Hankinson, our former president, is professor of Zoology in the Michigan State Normal College, Ypsilanti. He holds a long list of honors for his biological and ornithological investigations and has served faithfully in an official capacity in many clubs and societies.

Walter E. Hastings is a wholesale florist and nature photographer of South Lyon.

Arthur D. Moore is a merchant of South Haven.

William E. Praeger is head of the Science Department of Kalamazoo College and president of Michigan Friends of Our Native Landscape.

Bertram E. Barber is head of the Science Department, Hillsdale College, Hillsdale.

Ralph Beebe is an industrial worker and amateur photographer of Detroit.

William G. Fargo is a consulting engineer of national reputation, of Jackson.

Theodosia Hadley is instructor in the Science Department, Western State Normal School, Kalamazoo.

Mrs. Edith C. Munger is president of the Michigan Audubon Society, and though gray-haired and a grandmother, enjoys fifteen and twenty-mile hikes and plunges in the icy waters of Lake Michigan. She lives at Hart.

C. A. Newcomb, Jr., is a merchant of Detroit.

J. W. Stack is associate professor of Zoology, Michigan State College, East Lansing.

Aldred Scott Warthin is professor of Pathology, University of Michigan, Ann Arbor.

Leonard Wing, with his two brothers, runs a farm near Jackson.

(The Michigan Audubon Society, one of the live state organizations, furnished me most of the items given above. The members have on several occasions written me personally to tell of some prominent work produced by some other member. I would like to suggest that each state society for the study of birds, whatever its name, send me a list of its members who are also members of the W. O. C., together with a few interesting facts about the positions occupied, books written, etc.)

A PELICAN INCIDENT IN CHINA

The following very interesting incident is related in a letter to Treasurer Blincoe by Franklin F. Metcalf, professor of Botany in Fukien Christian University, Foochow, China. Who will tell us what kind of pelicans these were?

"You asked me to write a few notes, more than I did last time, but I am afraid that I have not much that would be of interest to bird-lovers, as all my work this year has been taken up entirely with the teaching of Botany and Zoology.

"I have one interesting note however in regard to the pelican. In the Anglo-Chinese College Museum they have one or two specimens of the pelican, but they are considered very rare in this region. At this time I have not access to the records, as Professor Kellogg is gone. About two weeks ago a flock of twelve were seen near the mouth of the river Min, about thirty miles down the river from the University. Some native collectors were able in some way to shoot three, of which I had an apportunity to buy two. To buy anything in China however is a very long process and may be of interest to some members.

"Two of the collectors first brought up to my house one of the large birds, and wanted me to buy it. I was very much interested but, of course, had to make out that I was not, and that it was not important to me whether I bought it or not. They also did not seem to want to sell it—Chinese fashion—just brought it up for me to look at, not to sell. Finally after a good deal of talking, all of this in the local language, the Foochow dialect, a language very difficult to learn, and one that I still have a great deal of difficulty with, even though I was given a whole year to study it and do nothing else. Finally after about a half-hour or more they wanted to know if I wanted it, and later asked me to say how much I would give for it. For me to say how much would have been to start out on the wrong foot, so to speak. At last they said that they wanted $10.00 for it, after first stating that their brother had told them not to sell for one cent less than $10.00 and that it was a very rare bird and that since this was the University they were going to let me have it cheap. After the Chinese have first stated their price you have some idea of what it is going to cost you, you never pay the first price and they never expect you to; depending on what it happens to be you can tell at about what proportion of the first price you may have to pay for it. If it was something to eat or wear it would have a rather definite value but a novelty like this can be sold from their standpoint for whatever they dare ask, what the traffic will bear. I then said that their price was too high, and that at that price I could not possibly buy it. Then I offered them $3.00 for it, and of course they almost got mad, that was almost an insult to them or rather they made it out that way. After some more talk about the weather and various other things we finally came back to talk price some more and of course he thought that $10.00 was very cheap. This talk went on for at least an hour; many times if you really want a thing here in China you may have to talk all day, especially if you want to get the object at a reasonable price. During all this time you have to keep good natured, even if dinner is waiting or classes are waiting on you. If you get provoked and get them provoked the chance of buying anything is small. He finally came down to $8.00 and I gradually came up to $4.00, then $5.00. Every time that he came down a little I would go up a little. I finally managed to buy the bird for the sum of $6.50 Mexican, which is about the same as $3.25 gold. After I had bought this one he said that they had wounded another and that it had got away but that a man was there watching it and that there might be a chance to get it also. There were only two that were hit according to their story, one killed outright and the other wounded.

"Well he hurried away; this happened about noon. It would take a man all day to go to the ocean and another day to get back here. Bright the next morning he came back, with a new man who pretends to be the other man that got the wounded bird. The wounded bird was only a ruse, to see if I wanted to buy another. If they had brought the two at the same time I would, according to their idea, have thought that the birds were common, and would not have paid as much for them. In this way they thought that they could get more money. You would think that I could get the second bird at the same price, without any trouble, but not so. It took just as long to get this one as the first one. This last one had a wing broken so that I told them at first that $6.00 was enough, but they held out for $6.50. This bird belongs to a different fellow, and he said bring it back if they could not sell it for $7.50, or more. I finally told them $6.50 the same as for the other; they said 'no' and carried the bird away back to the boat that they came in. I knew that they would be back, and about a half hour later they came back and said that they would let me have it for $7.00, and if I did not want it at that price, they were going to go for good. I knew that if they came that close to my price, they would again be back. Later after another half hour or more one of the men came back, but not the one that had said $7.00. If the same $7.00 man came back he would be losing 'face', so he had to send the other man back. So I bought the two birds for $13.00 or about $6.50 gold.

"Now for a few words about the birds themselves. One was a female, the other a male. The largest one weighed twenty-three pounds, the smallest just a little under twenty-three pounds. The largest had a wing spread of over *nine and one-half feet*. That certainly is a large bird.

"The same day I sent for the taxidermist, there is a very good one here in Foochow, though his prices are a little high. With him I had to bargain, as I had to do with the man that I bought the birds from. In this case the advantage was with him, as he knew that there was no one else in Foochow that could do the job in good shape, and the only reason why he did not hold me up was the fact that he knew that there would be many other things during the next few months that I would want him to do, many other things and that if he held me up too high I would not thereafter have any business for him. So the birds were mounted with the wings half stretched out. At present we have no large room to place them in; and if I had had them mounted with wings outstretched they would have taken up so much room that the Microtechnique Laboratory would have been too crowded to work in. They certainly make a nice looking pair of birds, and have helped advertise the Biology Department to all the students. Later, within the next year, when we move into the new Science Building I may have them remounted so that the width of the wing spread can be more appreciated."

FALL MEETING, KENTUCKY ORNITHOLOGICAL SOCIETY

The annual fall meeting of The Kentucky Ornithological Society was held at the Teachers College, Bowling Green, on October 16 and 17, 1925. On the evening of October 16 the president, Professor Gordon Wilson, gave as his annual address "The Faith of an Ornithologist", a resume of the philosophy of life he has evolved during his two decades of bird study. Mrs. H. E. Sanders, of Bowling Green, gave three interpretative whistling numbers: "Listen to the

Mockingbird", imitating the Mockingbird; "My Old Kentucky Home", imitating the Cardinal; and "Caroline", imitating the Bobwhite. Mr. Carl D. Herdman, one of the greatest bird gardeners of the South, talked on "Birds at My Sanctuary."

Early on the morning of October 17 some seventy-five bird students walked out to Mr. Herdman's sanctuary and inspected his sixty-five devices for attracting birds. At ten o'clock that morning the children of the Training School of the Teachers College gave several songs about birds and a drill representing the antics of a flock of crows. Mr. Vance Prather, Fort Thomas, Secretary of the Kentucky State Park Commission, explained the new method of nature-guiding in state parks, by which eminent scientists are encouraged to camp in the parks and offer their services to visitors. Professor L. Y. Lancaster of the science department of Teachers College, gave an address on "Canoe Trips on Drake's Creek and Barren River". He gave an interesting account of his many nature trips on these two streams, which still preserve much of their primitive wildness.

Plans were made for the spring meeting, to be held in Louisville, April 23 and 24. The invitation of the city of Henderson to hold the next fall meeting there was unanimously accepted. The members are eager to see the old home of Audubon there and the memorials which have been erected in recent years. One of the features of the present meeting was an exhibition of twenty-five of the original prints of Audubon's "Birds of America".

(If some attending member will secure a good photograph of Audubon's old home at Henderson, we will be glad to publish it.—Ed.)

It is with a very sincere regret that the present Secretary bids farewell to this column and his work in an official capacity in The Wilson Ornithological Club. The three years of service as Secretary have brought me some of the greatest joys of my life. The numerous friends who have helped my work to function properly deserve credit for whatever success may have come to this department. Pressing duties from other professional activities prevent me from serving longer in this capacity. I thank all of you for making these years so pleasant. I especially feel proud of the more than two hundred members who have come into our society in that time. Whatever time I can spare in the future will be gladly given to the W. O. C. and its interests.

GORDON WILSON, *Secretary.*

HO! FOR KANSAS CITY

The thirteenth annual meeting of the Wilson Ornithological Club will be held in Kansas City on December 28 and 29. The exact place of the meetings is not known at present, but will probably depend upon assignment by the officials of the American Association. The interest already shown indicates that this meeting will be as well attended as any previous meeting we have held. We are especially hoping that we may have a very large attendance from the states which border on the Missouri Valley, including Oklahoma and Texas. This meeting is being held in the interest of ornithology in the Missouri Valley.

The details of the program have not yet been fully worked out; but we can promise a few outstanding features. Professor Homer R. Dill will give his illustrated lecture on the Birds of the Laysan Islands. Mr. W. W. Bennett will give his illustrated lecture on Island Bird Life, being an account of colony-nesting birds in the Devil's Lake region, of North Dakota. Both of these lectures are

illustrated with superb bird photographs, which are equal to any that we have seen anywhere. Dean Weeks will read a paper on Birds and Poetry, and we hope that he will also read one or two of his own poems—perhaps the Bobolink poem or the Blue Jay lines or any one of a hundred others. If you hear this number it will be a lifetime memory. Then Professor Swenk will discuss the early ornithological and natural history explorations of the Missouri Valley, most of which started out from Independence, very close to Kansas City. This will be a particularly appropriate subject in this particular meeting place.

We are also notified that bird banding subjects will be presented by President Wm. I. Lyon, Secretary Samuel E. Perkins III, of Indianapolis, Field Secretary T. E. Musselman, of Quincy, Illinois, and possibly others. A special feature will be the exhibition of 2000 feet of motion picture entitled "The House Wren," by S. Prentiss Baldwin and T. Walter Weiseman. We are informed that this is probably the first time that a complete scenario of bird life has been arranged ahead, with the scenes devised and executed as the director works out the professional movies. It is said that about forty minutes are required to show this picture, which was shown for the first time at the A. O. U. meeting in November of this year.

We suppose that the program will start off with a business session sometime Monday morning. The rest of the day will be given over to the program of papers and lectures, doubtless including Monday evening also. Tuesday will continue the program. On both days the members will lunch together at some designated place. A general dinner is being planned for Tuesday evening, and our meeting will close with the informal social gathering after the dinner.

The Inland Bird Banding Association will hold its meetings at the same time and place, and will supply plenty of information and enthusiasm throughout the sessions for the cause of bird banding. Both organizations will make their headquarters at the Hotel Dixon.

RAILROAD TICKETS

The attendance at the general meetings will be large enough to insure the one and a half fare for the round trip over all railroads. When purchasing the ticket to Kansas City you will pay full fare; but you must ask for the Certificate of the Western Passenger Association, which will be filled out by the ticket agent at your request. You must purchase the ticket early enough to allow time for making out this certificate. The American Association and its associated societies are entitled to this rate, but to avoid any uncertainty it may be best to name the American Association as the meeting attended. When you reach the meetings you must deposit your certificate with the Secretary there, for validation. When ready to return you reclaim your validated certificate, which entitles you to purchase the return ticket at half the regular fare.

A LETTER FROM PRESIDENT GANIER

Fellow Members of The Wilson Club:

At Kansas City on December 28 and 29 next will occur an event that should be looked forward to by every member of The Wilson Ornithological Club. It is the thirteenth meeting of our organization and the first ever held west of St. Louis.

During the week of December 28 to January 2 there will gather at Kansas

City perhaps the greatest conclave of scientific organizations that have ever come together in the Missouri Valley—The American Association for the Advancement of Science. The Wilson Ornithological Club, as a constituent organization, embraces the opportunity to hold its meeting during that week in order to enable its members to commingle with those interested in kindred sciences. The Inland Bird Banding Association, including a most enthusiastic membership, will meet at the same time and blend its program and efforts with that of the older organization. Committees from both organizations are at work on a program that will be featured with interest from beginning to end. There will be morning and afternoon sessions both days at which papers on all phases of ornithology, including bird banding, will be presented. A number of these papers will be richly illustrated with lantern slides and motion pictures of bird life. An evening program is planned for the general public on Monday in the Assembly Room of the Kansas City Life Insurance Company on Broadway at Armour Boulevard. The place of the day sessions will be announced to the membership by the Secretary through a circular letter, together with additional information.

Aside from the interesting program there will be the opportunity to become acquainted with those interested in our vocation, or avocation as the case may be. The exchange of ideas and experiences leave a remembrance that well rewards those who journey to them from near and far. Kansas City, too, is ornithologically historic ground, for here was the base of study or leaving point for many of our early naturalists who explored the great plains and The Rockies.

Mr. Dix Teachenor of Kansas City, is Chairman of our Committee on Local Arrangements, for the meeting, and is rendering fine co-operation. Those who expect to be in attendance should write him as soon as possible. The Dixon Hotel has been designated as downtown headquarters for the organizations.

Very truly yours,

A. F. Ganier, *President,*
Wilson Ornithological Club.

LETTER FROM PRESIDENT LYON TO MEMBERS OF THE INLAND BIRD BANDING ASSOCIATION

Your Councilors have voted to hold their annual meeting with the Wilson Ornithological Club at Kansas City on December 28 and 29, in conjunction with the general meeting of the American Association for the Advancement of Science.

There have been many new features added to bird banding during the past year, many of which we hope to bring to Kansas City. The Missouri Valley is a favorable place for the general research work carried on through bird banding, and we need many more co-operators in this district; so we are requesting all of those who live in the nearby states to help make this meeting a success. It will be a big opportunity to meet those who are successful in the work, and give you many opportunities to see new ways to solve your problems.

Many of the papers will be illustrated by lantern slides, and some by motion pictures. It should be a program that will be long remembered.

The Hotel Dixon has been designated as our headquarters and arranged so our rooms will be all close together. Sincerely yours,

Wm. I. Lyon, *President,*
Inland Bird Banding Association.

THE LAST WORD

From our Local Committee under date of November 24.

I have delayed writing until Mr. Symon, Chairman of the Local Committee of the A. A. A. S., could give us some definite information. There are thirty-five different scientific societies meeting here during the Christmas week, and it has been very difficult for Mr. Symon to arrange all the dates until now. I have kept in touch with him and I believe I can now give you the final information concerning the joint meetings of the Wilson Ornithological Club and the Inland Bird Banding Association.

It was thought best not to have the meetings in the Assembly Room of the Kansas City Life Insurance Company, because the location is too far from the down town district. The Chamber of Commerce has assigned to us the Cabinet Room at the Hotel President for Monday morning and afternoon and Tuesday morning and afternoon, and the Congress Room in the same hotel for the Tuesday evening meeting. This hotel is only two blocks from the hotel headquarters.

The hotel headquarters were originally set for the Savoy Hotel, but have been changed to the Hotel Dixon on Twelfth and Baltimore, which is much closer to our meetng places. Members of the Club may write direct to the Dixon for room reservations. The prices range from $1.50 to $2.00 for single rooms and $2.50 to $3.00 for double rooms, without bath; with bath add a dollar to each of these figures.

I have made arrangements with a local photographer for a group picture either Monday or Tuesday noon, which will sell to the members at fifty cents a picture.

Mr. Symon informs me that facilities for motion pictures and slides will be at hand in these rooms.

I would suggest that the Club dinner be held on Monday evening at 6:30 instead of Tuesday, so as not to conflict with the Tuesday evening meetings.

I can arrange for a field day if it is desired, but I am of the opinion at this time that, since there are so many wonderful things to hear, few would care to miss anything by spending the time in the field.

Yours very truly,

Dix Teachenor, *Chairman,*
W. O. C. Local Committee.

[There is a conflict between this and previous announcements designating the hotel headquarters. We assume that the Local Committee is supreme in matters of local arrangements. This conflict will be adjusted promptly by correspondence, and any members who are uncertain may write to Mr. Dix Teachenor, Kansas City Life Insurance Company, Kansas City, Mo., for information.—Ed.]

CONSERVATION

The Editor is inclined to open a new department in the Wilson Bulletin under the heading above. If this is done it will be done on the theory that bird lovers and bird students and ornithologists, being interested in bird life, are also interested in the perpetuation of bird life; that they are concerned with the future of the bird life in America. If this is so, why shouldn't we discuss the problem among ourselves?

There are practically no people nowadays who do not accept the proposition that the wild life must be saved to the future. We may assume that there is unanimity on this subject. The division comes when we begin to consider the methods of salvation. Here we find wide variance of opinion on the efficacy of such methods as the bag limit on game birds, the shorter open season versus the closed season, the game refuge as a panacea, etc. These questions, and others, are very vital in the solution of the problem of wild life conservation in our country. Who shall decide? Who shall be heard? There has been no period in the history of our country when the interest in its wild life is more widespread than it is today. There has been no time when the issues have been as clear-cut as they are at the present. There has never been a time when views were more conflicting on the subject of the proper method of wild life conservation than at the present time. If too much time is not consumed in deliberation we may expect good results in the interest of the wild life. We must beware of the individual who is speaking for his own interests, rather than for the speechless animal, even though he may be quite sincere.

On this subject we find a remarkably forceful article by William C. Gregg, in the *Outlook* for September 16, 1925. We wish that every friend of bird life in America would hunt up this article and read it. It gives a side-light on the general situation with which we should all be acquainted. We do not need to close our eyes to other side-lights in apprehending this one.

We have just received Department Circular 360, of the U. S. Department of Agriculture. This pamphlet is a "Directory of Officials and Organizations Concerned with the Protection of Birds and Game: 1925." It gives a very long list of federal, state, Canadian officials who are charged with the duties of wild life protection. It also lists a great many of the federal, state, and Canadian organizations, with their officers, which make wild life protection a major or minor concern. If figures could be obtained it would be a matter of interest to many to know the total membership in each of these organizations. It is somewhat surprising, and very gratifying, to find so many organizations engaged in the work of conservation of our wild life. This Circular may be obtained from the Department of Agriculture as long as the supply lasts.

A summary of the "Game Laws for the Season 1925-26" is also at hand, being issued as Farmers' Bulletin 1466, of the U. S. Department of Agriculture. It presents the information usually contained in this bulletin. The one feature of this bulletin which stands out and obtrudes itself is the order permitting the killing of Bobolinks, issued May 7, 1925. The nature of this order may be best shown by quoting as follows from page 43 of the bulletin in question:

. . . "that until further notice persons may kill by shooting, bobolinks, commonly known as reedbirds or rice birds, from half an hour before sunrise to sunset, from September 1 to October 31, inclusive, in the States of Pennsylvania, Delaware, and Maryland and the District of Columbia, and from August 16 to November 15, inclusive, in the States of Virginia, North Carolina, South Carolino, Georgia, and Florida, but the birds so killed shall not be sold, offered for sale, or shipped for purposes of sale, or be wantonly wasted or destroyed, but they may be used for food purposes by the persons killing them, and they may be transported to hospitals and charitable institutions for use as food."

This is, apparently, the same order that has been in force since January 17, 1919, except that one day is added to the open season, and New Jersey is eliminated. It seems preposterous in the first place that the Department of Agriculture would use its power under the Migratory Bird Law to make the Bobolink a game bird. In the second place it passes comprehension that the same authorities should encourage the destruction of Bobolinks by allowing them to be used for food.

Under this system a person may go out and shoot a batch of Bobolinks for the table, and claim exemption under the pretense of assisting agriculture. However, from the fact that the open season applies to certain northern states, we conclude that the Department of Agriculture wishes to encourage the destruction of Bobolinks. We are doubtful about the growth of rice in these northern states, but possibly these agricultural states raise other grains which the Bobolinks may feed upon.

If the Bobolinks cause serious damage to the rice fields in the south would it not have been sufficient to allow the owners of these fields to reduce the birds upon their own premises, and to prohibit the use of the birds for food? The ostensible purpose of this regulation is to prevent the damage which is done by the birds, and not to provide a new food supply. It looks, however, as though the net result is the latter. It is possible that the insertion of the clause permitting the killers to use the birds for food was the result of an effort at superlative efficiency. We think, however, that it is wrong in principle, as the young debater says. We once read a book on the care of ornamental trees, by a New Jersey authority, in which he condemned the common practice of allowing men to trim, prune, and cut out trees for the wood as compensation for the labor. This principle of compensation encourages the woodman to remove trees which should not be removed. Perhaps the analogy with the Bobolink regulation is clear enough.

We have always been strongly in favor of the Game Refuge Bill. But now in view of this Bobolink regulation we wonder whether it is wise and safe to repose in the federal government any more power over the wild life than it now has. We have heretofore believed in the efficiency of centralized authority; now we are wondering about it.—T. C. S.

A CONSERVATIONIST'S CREED AS TO WILD LIFE ADMINISTRATION

[Dr. Joseph Grinnell, of California, presents in *Science*, November 13, 1925, the following splendid summary of the principles of wild life conservation, under the above heading. We believe that our readers will generally agree that this epitome deserves wide dissemination, in which the BULLETIN is glad to do its part.—Ed.]

(1) I BELIEVE that the fullest use should be made of our country's wild life resources from the standpoint of human benefit—for beauty, education, scientific study, recreation, for sport, for food, for fur, etc. *All* these possible uses should be considered in the administration of wild life, not any one of them exclusively of the others. At the same time, any one use may be of more importance than the others in a given locality, so that such locality may be administered with that particular value most prominently in view.

(2) I believe that that portion of our wild animal life known as "game" belongs no more to the sportsman than to other classes of people who do not

pursue it with shotgun and rifle. More and more the notebook, the field glass and the camera are being employed in the pursuit of game as well as other animals. The newer generation by hundreds of thousands is turning to nature-out-of-doors, for recreation, instruction and pleasure through such agencies as the national parks, summer camps, Boy Scouts, Girl Scouts and Camp Fire Girls. Indeed, these other claimants upon our "game" resources are probably reaching to numbers greater than those of active sportsmen; *their* rights certainly deserve at least equal consideration.

(3) I believe it is unwise to attempt the absolute extermination of any native vertebrate species whatsoever. At the same time, it *is* perfectly proper to reduce or destroy any species in a given neighborhood where sound investigation shows it to be positively hurtful to the majority of interests. For example, coyotes, many rodents, jays, crows, magpies, house wrens, the screech owl and certain hawks may best be put under the ban locally.

(4) I believe it is wrong to permit the general public to shoot crows or any other presumably injurious animals during the breeding season of our desirable species. It is dangerous to invite broadcast shooting of any so-called vermin during the regular closed season, when the successful reproduction of our valuable species is of primary importance and is easily interfered with.

(5) I believe in the collecting of specimens of birds and vertebrates generally for educational and scientific purposes. The collector has no less right to kill non-game birds and mammals, in such places where he can do so consistently with other interests, than the sportsman has the right to kill "game" species. A bird killed, but preserved as a study specimen, is of service far longer than the bird that is shot just for sport or for food.

(6) I believe that it is wrong and even dangerous to introduce (that is, turn loose in the wild) alien species of either game or non-game birds and mammals. There is sound reason for believing that such introduction, if "successful," jeopardizes the continued existence of the native species of our fauna, with which competition is bound to occur.

(7) I believe that the very best known way to "conserve" animal life, in the interests of sportsman, scientist and nature-lover, alike, is to preserve conditions as nearly as possible favorable to our own native species. This can be done by the establishment and maintenance of numerous wild-life refuges, not only as comprised in private and public parks, but in national forests and elsewhere.

(8) In the interests of game and wild life conservation generally, I believe in the wisdom of doing away with grazing by domestic stock, more especially sheep, on the greater part of our national forest territory. A further, and vital, interest bound up in this factor is the conservation of water.

(9) I believe that the administration of our game and wild life resources should be kept as far as possible out of politics. The appertaining problems are essentially biological ones and are fraught with many technical considerations not appreciated or understood by the average politician or sportsman. The resources in question should be handled as a national asset, administered with the advice of scientifically trained experts.

Joseph Grinnell.

Museum of Vertebrate Zoology,
University of California.

NECROLOGY

JOHN HALL SAGE died in Boston on August 16, 1925, having passed his seventy-eighth birthday. Mr. Sage was one of the five founders of the Wilson Ornithological Club, and maintained his membership to the day of his death. He was the first of the five to decease. He was born at Portland, Connecticut, on April 20, 1847, the son of Charles Henry and Eliza Hall Sage. His principal career was in the field of business, in which he occupied numerous high and trusted positions. His services to American ornithology, as an officer in the American Ornithologists' Union and as co-author of the "Birds of Connecticut", are well-known. The writer did not enjoy a personal acquaintance with Mr. Sage but saw him at two of the A. O. U. meetings. On such occasions a stranger was impressed with the kindness and benevolent good-will which radiated from his countenance and unassuming manner. Scientific men, and professional ornithologists in particular, are apt to have a cold, uncompromising, and overbearing attitude in scientific matters, which becomes so fixed and stereotyped a part of the nature that it dominates also in human relations. Mr. Sage was free from this, perhaps because he was an amateur, and lacked the assurance of professionalism. Personality is a tremendous factor in human relations. Ordinarily we do not pause to evaluate it in human life; but after death it stands out in bold relief. Fortunate, then, is the man of whom it can be said that he was good and kind. Such is a stranger's estimate of John H. Sage.

The other four founders of the W. O. C. are Frank L. Burns, Dr. Lynds Jones, Dr. L. Otley Pindar, and Dr. R. M. Strong. It is our desire to publish, during the next year or two, autobiographical sketches of these men. They have all been invited and urged to prepare such.—T. C. STEPHENS.

JAMES BRITTON PURDY died at his home near Plymouth, Michigan, on June 2, 1925, at the age of eighty-two years. Mr. Purdy was a student of the bird life of his state. He had formed a collection of about two hundred mounted birds, and a collection of 1800 birds' eggs, as we learn from members of the family. We understand that he also possessed a valuable ornithological library, containing a number of complete files of minor bird publications which flourished along in the nineties. He was an active member of the Michigan Ornithological Club, and his portrait appears in the Bulletin of that organization, Volume IV, 1903, page 50. He was an associate member of the A. O. U. for over thirty years. We do not find the record that he was ever a member of the W. O. C., but he left a very considerable part of the file of the WILSON BULLETIN, which is now being completed by his daughter, Mrs. Nettie Purdy Moore, who also retains possession of the collections. It is an interesting fact that the farm on which he lived and died has been in the possession of the family for ninety-seven years. Mr. Purdy was born on June 23, 1843.—T. C. STEPHENS.

INDEX FOR VOLUME XXXVII, 1925

Bailey, Harold H., The Scissor-tailed Flycatcher in Florida, 94
Bailey, Mary L., The snake and the Bittern, 220
Baldwin, S. Prentiss, Notes from S. Prentiss Baldwin, 98-100
Bennett, Walter W., The Rock Wren in Iowa, 93
Blincoe, Ben J., The Egret in the Great Miami Valley, 220
Byrens, O. M., Some notes on the nesting material of the Cedar Waxwing, 94
——Statistics on the House Wren, 157-159
——Some additional observations made at my feeding station, 223
Christy, Bayard H., The Arkansas Kingbird and Evening Grosbeak in northern Michigan in summer, 173
——Summer birds at Huron Mountain, Michigan, 208-216
Clay, Marcia B., The odd behavior of a stunned Ruffed Grouse, 43
——The Prothonotary Warbler at North Bristol, Trumbull County, Ohio, 225
Commons, Mrs. Marie A., Report of the Tanager Hill bird banding station, 1923-24, 48-51
——The trap habit, 232
Crosby, Maunsell S., May bird censuses in Dutchess County, New York, during 1925, 220
——Ten all day bird censuses from Dutchess County, N. Y., 150-157
Dales, Mrs. Marie A., Another record of the Mockingbird at Sioux City, Iowa, 93
——Some experiences in bird banding, 177-179
——A marauding Bluejay, 224
Danforth, Stuart T., Birds seen between Porto Rico and New York, 76-77
Felton, W. R., The nest of the Magpie, 42
Gabrielson, Ira N., Three bird records from Crystal Lake, Hancock County, Iowa, 226
Ganier, A. F., The Starling breeding in Tennessee, North Carolina, and Virginia, 174
——Leconte's Sparrow at Nashville, Tennessee, 227
Gifford, H., Occurrence of the Wood Ibis near Omaha, Nebraska, 219
Gloyd, Howard K., Field studies of the diurnal raptores of eastern and central Kansas, 133-149
Hempel, Kathleen M., Adventures in bird banding, 95-98
Hoffman, E. C., Bluejay notes, 101
——House Wrens and arsenate-dusted currant bushes, 224
Knechtel, G. W., Some bird notes from Ontario for the year 1924, 176
Lancaster, L. Y., Some bird notes from Bowling Green, Warren County, Kentucky, 44
Larson, Adrian, The birds of Sioux Falls, South Dakota, and vicinity, 18-38, 72-76
Lewis, John B., Some notes on the song of the Whip-poor-will, 44
——The Cedar Waxwing feeding on apple petals, 91
——Local variation in the song of the Maryland Yellow-throat, 94
Lewis, Walter E., Large flocks of wintering blackbirds at Gate, Oklahoma, 91
Lincoln, Frederick C., Mystery bands, 100.
——Mystery bands numbers 1 and 2—season 1925, 231
Morse, Etta M., Some experiences with Yellow Warblers, 222
Mounts, Beryl T., Further notes on the food of the Logger-head Shrike, 221
Mousley, Henry, The Robin nesting on the ground, 91
Murdock, T. M. and Walter W. Bennett, The Lark Bunting at Sioux City, Iowa, 172
Musselman, T. E., Banding ducks at Scobey Lake, Missouri, 227-231
Nauman, E. D., The Whip-poor-will: Its prospects of survival in southern Iowa, 203-206
Nice, Margaret M., Observations on shorebirds in central Oklahoma in 1924, 199-203
Pindar, L. Otley, The Scissor-tailed Flycatcher in Kentucky, 41
——An explanation regarding the season of activity of snakes in Arkansas, 45

——Birds of Fulton County, Kentucky, 77-88, 163-169
——Some notes on the birds of Versailles, Woodford Co., Kentucky, 173
Roads, Katie M., Some bird notes from Hillsboro, Highland Co., Ohio, 92
——The House Wren vs. Bewick's Wren, 92
Rosen, W. M., The Arkansas Kingbird in central Iowa, 172
——Notes on the shore birds of central Iowa, 206-208
Sherman, Althea R., Down with the House Wren boxes, 1-13
——Additional evidence against the House Wren, 129-132
Spiker, Chas. J., The Mockingbird at Sioux City, Iowa, 93
——The Blue-gray Gnatcatcher at Sioux City, Iowa, 219
Starry, A. C., Nesting habits of the Magpie, 42
Stephens, T. C., The Pine Grosbeak at Sioux City, Iowa, 41
Stoner, Dayton, Bird banding at the Iowa Lakeside Laboratory during the summers of 1923 and 1924, 15-17
Sutton, George Miksch, Notes on the nesting of the Goshawk in Potter County, Pennsylvania, 193-199
Wallace, Chas. R., Owl notes from Ohio, 13-15
——The Great Blue Heron in Delaware County, Ohio, 226
Wayne, Arthur T., A late autumnal record for the Bachman's Warbler, 41
Weeks, Leroy Titus, White herons on the upper Mississippi River, 219
Weigle, Mrs. Charles F., Bad Habits of the House Wren, 160-163
Whitney, T. H., Martins and martin houses, 65-72
——An observation on the behavior of the Chimney Swift under unusual circumstances, 224
Wilson, Gordon, Some Kentucky bird notes, 44
——Some notes on the summer birds of Warren County, Kentucky, 173
Wolden, B. O., The Egret in Emmett County, Iowa, 220
Worley, Loenard G., Some records of Nebraska birds for the spring of 1925, 175

Acanthis l. linaria, 33, 163
Accipiter cooperi, 28, 85, 210
velox, 28, 85, 210
Actitis macularia, 27, 83, 203, 210
Aechmophorus occidentalis, 13
Aegialitis semipalmatus, 27. *See* Charadrius
Agelaius p. arctolegus, 32
p. phoeniceus, 88, 191, 213
p. predatorius, 32
Aix sponsa, 22, 80, 173, 226
Alabama, 103
Ammodramus savannarum australis, 34, 163
Anas platyrhynchos, 21, 79
rubripes, 21, 79, 209
Anhinga anhinga, 79
Anser albifrons gambeli, 23, 80
Anthus rubescens, 74, 168
spraguei, 74
Antrostomus carolinensis, 87
v. vociferus, 44
Aquila chrysaetos, 28
Archibuteo lagopus sancti-johannis, 28, 85
Archilochus colubris, 30, 87, 212
Ardea h. herodias, 24, 81, 209, 225
Arenaria interpres morinella, 27
Asio flammeus, 29, 86
wilsonianus, 29, 86, 211
Astragalinus t. tristis, 34, 163, 213
Astur a. atricapillus, 28, 85, 193-199
Avocet, 25

Baelophus bicolor, 168
Baldpate, 21, 80
Bartramia longicauda, 27, 83
Bent, A. C., review of, 190
Bird Banding, 15, 46, 95, 177, 227
Bittern, 24, 81, 206, 209, 220
Least, 24, 81, 176, 209
Blackbird, Brewer's, 33, 91
Northern Red-wing, 32
Red-winged, 32, 88, 91, 213
Rusty, 33, 88, 177
Yellow-headed, 32, 206
Bluebird, 76, 169, 216
Blue-gray Gnatcatcher, 169, 219
Blue Jay, 31, 88, 212, 224
Bobolink, 32, 88
Bob-white, 27, 83, 213
Bombycilla cedrorum, 38, 91, 94, 165, 214
garrula, 38
Bonassa u. togata, 210
umbellus, 43
Botaurus lentiginosus, 24, 81, 209
Brant, 81
Branta bernicla glaucogastra, 81
c. canadensis, 23, 81
c. hutchinsi, 23, 81
c. minima, 24

Brown Creeper, 75, 168, 216, 220
Brown Thrasher, 74, 168, 174, 216
Bubo v. virginianus, 29, 86, 211
v. subarcticus, 29
Buffle-head, 22, 80, 175
Bunting, Indigo, 37, 164
Lark, 37, 172
Lazuli, 176
Painted, 164
Snow, 34, 177
Buteo b. borealis, 28, 85, 210
latissimus, 85
lineatus, 85
platypterus, 210
swainsoni, 28, 85
Butorides v. virescens, 24, 81

Calcarius l. lapponicus, 34, 163
ornatus, 34
Calamospiza melanocorys, 37, 172
Campephilus principalis, 86
Canachites canadensis canace, 210
Canada Ruffed Grouse, 210
Canada Spruce Partridge, 210
Canvas-back, 22, 80
Cardinal, 164, 173, 176
Cardinalis c. cardinalis, 164
Carpodacus p. purpureus, 33, 77, 163, 213
Carolina Paroquet, 86
Casmerodius egretta, 81, 219, 220
Catbird, 74, 168, 174, 216
Cathartes aura septentrionalis, 28, 44, 85
Catoptrophorus s. inornatus, 27
s. semipalmatus, 82, 203
Centurus carolinus, 87
Cerchneis s. sparveria, 86, 211. *See* Falco
Certhia familiaris americana, 75, 168, 216
Ceryle a. alcyon, 30, 86, 211
Charadrius melodus, 83
semipalmatus, 83, 203. *See* Aegialitis
Chaetura pelagica, 30, 87, 212, 224
Charitonetta albeola, 22, 80
Chat, Long-tailed, 74
Yellow-breasted, 167
Chaulelasmus streperus, 21, 80
Chen caerulescens, 23
h. hyperboreus, 23, 80
h. nivalis, 23
Chickadee, 168, 174, 216
Carolina, 168
Long-tailed, 75
Chimney Swift, 30, 87, 212, 224
Chlidonias nigra surinamensis, 79. *See* Hydrochelidon
Chuck-will's widow, 87
Chondestes g. grammacus, 34, 163
Chordeiles v. virginianus, 30, 87, 92, 212
Circus hudsonius, 28, 85, 210
Cistothorus stellaris, 75, 168
Clangula c. americana, 22. *See* Glaucionetta
Coccyzus a. americana, 29, 86
erythrophthalmus, 29, 86, 211
Colaptes auratus auratus, 87
a. luteus, 30, 212
cafer collaris, 30
Colinus v. virginianus, 27, 83
Colymbus auritus, 19
holboelli, 19
nigricollis californicus, 19
Compsothlypis americana, 166
a. pusilla, 214
Conuropsis carolinensis, 86
Cooke, May Thacher, review of, 111
Coot, 25, 82
Coturnicops noveboracensis, 82
Coragyps urubu, 85
Cormorant, Double-crested, 20, 79
Florida, 79
Corvus b. brachyrhynchos, 32, 88, 213
corax principalis, 213
corax sinuatus, 88
Cowbird, 32, 88, 91, 213
Crane, Little Brown, 24
Sandhill, 24, 82
Whooping, 24, 82
Crossbill, 33, 213
White-winged, 33
Crow, 32, 88, 91, 213
Cryptoglaux a. acadica, 29, 211
Cuckoo, Black-billed, 29, 86, 211
Yellow-billed, 29, 86, 173
Curlew, Eskimo, 83
Hudsonian, 126
Long-billed, 83
Cyanocitta c. cristata, 31, 88, 212

Dafila acuta americana, 22, 80
Dendroica ae. aestiva, 73, 166, 215
c. caerulescens, 73, 166, 215
castanea, 167, 215
cerulea, 166
coronata, 73, 77, 166, 215
discolor, 76, 167
dominica albilora, 167
fusca, 73, 167, 215
magnolia, 73, 166, 215
p. palmarum, 167
pensylvanica, 73, 77, 215
striata, 73, 77, 167, 215
tigrina, 166, 214
vigorsi, 167, 215
virens, 167, 215
Dickcissel, 37, 164, 176
Dolichonyx oryzivorus, 32, 88, 213
Dowitcher, 176

Dryobates borealis, 86
p. medianus, 30, 86
p. pubescens, 44, 86
v. auduboni, 86
v. leucomelas, 211
v. villosus, 30, 86, 211
Duck, Black, 21, 79, 209
Lesser Scaup, 22, 80, 209
Ring-necked, 22, 80
Ruddy, 23, 80
Scaup, 22, 80
Wood, 22, 80, 173, 176, 226
Dumetella carolinensis, 74, 168, 216

Eagle, Bald, 28, 85, 211
Golden, 28
Ectopistes migratorius, 83
Egret, 81, 219, 220
Snowy, 81
Egretta c. candidissima, 81
Eider, Northern, 23
Elanoides forficatus, 85
Empidonax, flaviventris, 31, 87
minimus, 31, 87, 212
t. alnorum, 212
t. trailli, 31, 87
virescens, 87
English Sparrow, 33
Ereunetes pusillus, 26, 82, 202, 210
Erismatura jamaicensis, 23, 80
Euphagus carolinus, 33, 88
cyanocephalus, 33, 91

Falco c. columbarius, 29, 85, 211
mexicanus, 29
peregrinus anatum, 85, 211
s. sparverius, 29. *See* Cerchneis
Flicker, 87, 173
Northern, 30, 212
Red-shafted, 30
Florida, 94
Florida caerulea, 81
Flycatcher, Acadian, 87
Alder, 212
Least, 31, 87, 212
Olive-sided, 31, 87, 212, 226
Scissor-tailed, 41, 94, 174
Traill's, 31, 87, 175
Yellow-bellied, 31, 87

Gabrielson, Ira N., review of, 63
Gadwall, 21, 80
Gallinago delicata, 25, 82, 201, 210
Gallinula chloropus cachinnans, 82
galeata, 25
Gallinule, Florida, 25, 82, 176
Purple, 82
Gavia immer, 20, 77, 208
Gelochelidon nilotica aranea, 79
Georgia, 41, 221
Geothlypis t. trichas, 74, 94, 167, 215
Glaucionetta clangula americana, 80. *See* Clangula
islandica, 80
Godwit, Hudsonian, 26, 202
Golden-eye, 22, 80, 175
Barrow's, 80
Goose, Blue, 23, 175
Canada, 23, 81, 175, 206
Greater Snow, 23
Hutchin's, 23, 81, 175
Snow, 23, 80
White-fronted, 23, 81, 175
Goldfinch, 34, 163, 213
Goshawk, 28, 85, 193-199
Grackle, Bronzed, 33, 88, 173, 213
Purple, 88
Greater Yellow-legs, 26, 82, 203, 206
Grebe, Eared, 19
Holboell's, 19, 78
Horned, 19
Pied-billed, 20, 78
Western, 19
Grosbeak, Black-headed, 175
Blue, 164
Evening, 88, 173, 213, 223
Pine, 45, 163
Rose-breasted, 37, 164, 175, 214
Grouse, Canada Ruffed, 210
Ruffed, 43
Grus americana, 24, 82
canadensis, 24
mexicana, 24, 82
Guiraca c. coerulea, 164
Gull, Bonaparte's, 79, 175
Franklin's, 20, 78, 175
Herring, 20, 78, 209
Laughing, 78
Ring-billed, 20, 78

Hawk, Broad-winged, 85, 210
Cooper's, 28, 85, 210
Duck, 85, 175, 210, 220
Marsh, 28, 85, 176, 210
Pigeon, 28, 85, 175, 210
Red-tailed, 28, 85, 210
Rough-legged, 28, 85
Sharp-shinned, 28, 85, 210
Sparrow, 28, 210
Swainson's, 28, 85
Haliaeetus l. leucocephalus, 28, 85, 211
Hedymeles ludovicianus, 164, 214. *See* Zamelodia
Helodromas s. solitarius, 27
Helmintheros vermivorus, 13, 166
Heron, Black-crowned Night, 24, 82, 176
Green, 24, 81, 206
Great Blue, 24, 81, 209, 225
Little Blue, 81
Yellow-crowned Night, 82
Hesperiphona v. vespertina, 88, 173, 213
Hirundo erythrogaster, 37, 165, 214

House Wren, 1-13, 92, 129-132, 157-163
Hydrochelidon nigra surinamensis, 20. *See* Chlidonias
Hummingbird, Ruby-throated, 30, 87, 212
Hylocichla a. aliciae, 76, 169, 216
f. fuscescens, 169, 216
f. salicicola, 76
guttata pallasi, 44, 76, 169, 216
mustelina, 75, 169, 216
ustulata swainsoni, 76, 169, 216

Ibis, Wood, 81, 219
Icteria virens longicauda, 74
Icterus bullocki, 33
galbula, 33, 88
spurius, 33, 88
Ictinia mississippiensis, 85
Illinois, 102
Indiana, 160
Ionornis martinicus, 82
Iowa, 14, 41, 93, 95, 172, 177, 206, 219, 220, 224, 226
Iridoprocne bicolor, 37, 165, 214
Ixobrychus exilis, 24, 81, 209

Junco h. hyemalis, 36, 77, 164, 214
Junco, Slate-colored, 36, 77, 174, 214
Shufeldt's, 175

Kansas, 133-149
Kentucky, 41, 44, 77, 163, 173, 174
Kildeer, 27, 83, 203, 210
Kingbird, 30, 87, 173, 212
Arkansas, 31, 172, 173, 212
Kingfisher, Belted, 30, 86, 211
Kinglet, Golden-crowned, 75, 168, 216
Ruby-crowned, 75, 169, 216
Kite, Mississippi, 85
Swallow-tailed, 85
Knot, 176

Lanivireo flavifrons, 72, 165
s. solitarius, 72, 165, 214
Lanius borealis, 38, 165
ludovicianus excubitorides, 38
l. ludovicianus, 165, 221
l. migrans, 165
Lark, Horned, 31, 88
Hoyt's, 31
Prairie Horned, 31, 88
Saskatchewan, 31
Larus argentatus, 20, 78, 209
atricilla, 78
delawarensis, 20, 78
franklini, 20, 78
philadelphia, 79
Lesser Yellow-legs, 26, 82, 203, 206
Limosa haemastica, 26, 202
Lobipes lobatus, 25
Long-billed Dowitcher, 82, 201
Longspur, Chestnut-collared, 34
Lapland, 34, 163
Smith's, 175
Loon, 20, 77, 78, 208
Lophodytes cucullatus, 21, 79
Loxia curvirostra minor, 33, 213
leucoptera, 33
Lymnodromus griseus scolopaceus, 82, 201
Lymnothlypis swainsoni, 166

Magpie, 31, 42
Mallard, 21, 79
Mareca americana, 21, 80
Marila affinis, 22, 80, 209
americana, 22, 80
collaris, 22, 80
marila, 22, 80
valisineria, 22, 80
Maryland Yellow-throat, 74, 94, 167, 215
Meadowlark, 32, 88, 213
Western, 32
Melanerpes erythrocephalus, 30, 87
Meleagris gallopavo silvestris, 83
Melospiza georgiana, 36, 164, 214
lincolni, 36, 164
melodia, 36, 164, 214
Membership roll, 112-128
Merganser, American, 21, 79, 209
Hooded, 21, 79
Red-breasted, 21, 79
Mergus americanus, 21, 79, 209
serrator, 21, 79
Micropalama himantopus, 26, 201
Michigan, 94, 157, 173, 208-216, 223
Mimus polyglottos, 92, 93, 168
Minnesota, 48
Mniotilta varia, 72, 166, 214
Mockingbird, 92, 93, 166, 174
Molothrus a. ater, 32, 88, 91, 213
Montana, 42
Mourning Dove, 85, 210
Western, 32
Muscivora forficata, 41, 94
Mycteria americana, 81, 219
Myiarchus crinitus, 87, 212
Myiochanes virens, 31, 87, 212

Nannus h. hiemalis, 75, 168, 216
Nebraska, 175, 219, 220
Nelson, E. W., review of, 111
Nettion carolinense, 21, 80
New York, 150-157, 220
Nice, Mrs. Margaret M., review of, 108
Nighthawk, 30, 87, 92, 212
North Carolina, 174
Numenius americanus, 83
borealis, 83
Nuthatch, Red-breasted, 75, 168, 216
White-breasted, 75, 168

Nuttallornis borealis, 31, 87, 212, 226
Nutting, C. C., review of, 110
Nyctanassa violacea, 82
Nyctea nyctea, 29, 86
Nycticorax n. naevius, 24

Ohio, 13, 43, 92, 225
Oidemia deglandi, 23
Oklahoma, 91, 199-203
Olor columbianus, 24. *See* Cygnus
Ontario, 176
Oporornis agilis, 167
formosa, 167
philadelphia, 74, 215
Oriole, Baltimore, 33, 175
Bullock's, 33
Orchard, 33, 176
Osprey, 177, 211
Otocoris a. alpestris, 88
a. enthymia, 31
hoyti, 31
praticola, 31, 88
Otus a. asio, 29, 86
Oven-bird, 73, 167, 215
Owl, Arctic Horned, 29
Barn, 86
Barred, 29, 86, 211
Burrowing, 29
Great Horned, 14, 29, 86, 211
Long-eared, 13, 29, 86, 211
Saw-whet, 29, 211
Screech, 29, 86
Short-eared, 29, 86
Snowy, 29, 86
Oxyechus vociferus, 27, 83, 203, 210

Pandion h. carolinensis, 211
Partridge, Canada Spruce, 210
Passenger Pigeon, 83
Passer domesticus, 33, 169, 213
montanus, 169
Passerculus sandwichensis savanna, 34, 163, 213
Passerella i. iliaca, 36, 164
Passerherbulus henslowi, 34, 163
lecontei, 34, 227
Passerina ciris, 164
cyanea, 37, 164
Pelecanus erythrorynchos, 20, 79
occidentalis, 76
Pelican, Brown, 76
White, 20, 79
Pelidna alpina sakhalina, 202
Pennsylvania, 193-199
Penthestes atricapillus, 168, 216
a. septentrionalis, 75
c. carolinensis, 168
Petrochelidon l. lunifrons, 37, 165, 214
Peucaea aestivalis bachmani, 164
Phalacrocorax a. auritus, 20, 79
a. floridanus, 79
Phalarope, Northern, 25, 207
Wilson's, 25, 82, 201, 207
Phasianus torquatus, 28
Philohela minor, 25. *See* Rubicola
Phloeotomus p. pileatus, 87
Phoebe, 31, 87, 212
Pica p. hudsonia, 31, 42
Picoides arcticus, 211
Pine Siskin, 44, 163, 213
Pinicola enucleator leucura, 41
Pintail, 22, 80, 220
Pipilo e. erythrophthalmus, 36, 164
maculatus arcticus, 37
Pipit, 74, 168
Piranga erythromelas, 37, 164, 214
rubra, 92, 164
Pisobia bairdi, 26
fusicollis, 26, 202
maculata, 26, 82, 201
minutilla, 26, 82, 202, 210
Planesticus m. migratorius, 76, 169, 216
Plectrophenax n. nivalis, 34
Plover, Black-bellied, 27, 83, 44, 176
Golden, 27, 83
Piping, 176
Semipalmated, 27, 83, 203, 207
Upland, 27, 83
Pluvialis d. dominica. *See* Charadrius
Polioptila c. caerulea, 169, 219
Pooecetes g. gramineus, 34, 163, 213
Porzana carolina, 25, 82
Prairie Chicken, 28
Prairie Falcon, 29
Proceedings, 46-48, 53-58, 186-190, 239
Progne subis, 37, 165, 214
Protonotaria citrea, 166, 173, 225
Purdy, James Britton, obituary, 248
Purple Finch, 33, 77, 163, 213
Purple Martin, 37, 65-72, 165, 173, 214

Quebec, 91
Querquedula discors, 21, 80
cyanoptera, 21, 80
Quiscalus quiscala aeneus, 33, 88, 213
q. quiscala, 88

Rail, Carolina, 25, 82, 175, 176, 206
King, 25, 82, 220
Virginia, 25, 82, 209
Yellow, 82
Rallus elegans, 25, 82
virginianus, 25, 82, 209
Raven, 88
Northern, 213
Recurvirostra americana, 25
Redpoll, 33, 163
Redstart, 74, 168, 215
Reed, C. I. and B. P., review of, 110
Regulus c. calendula, 75, 169, 216
s. satrapa, 75, 168, 216
Ring-necked Pheasant, 28

Riparia riparia, 38, 165
Robin, 76, 91, 169, 216
Rubicola minor, 82, 210. *See* Philohela
Ruddy Turnstone, 27
Ruffed Grouse, 43

Sage, John Hall, obituary, 248
Salpinctes o. obsoletus, 93
Sandpiper, Baird's, 26, 177
Bartramian, 206, 207, 208
Buff-breasted, 27, 83
Least, 26, 82, 202, 206, 207, 210
Pectoral, 26, 82, 175, 177, 201, 206, 207
Red-backed, 202, 207
Semipalmated, 26, 82, 202, 206, 207, 210
Solitary, 27, 82, 175, 210
Spotted, 27, 83, 175, 203, 206, 210
Stilt, 26, 201, 207
White-rumped, 26, 175, 177, 202
Sapsucker, Yellow-bellied, 30, 87, 175, 212
Sayornis phoebe, 31, 87, 212
Scoter, White-winged, 23
Seiurus aurocapillus, 73, 167, 215
motacilla, 74, 167, 173
noveboracensis, 167
n. notabilis, 74, 167
Setophaga ruticilla, 74, 168, 215
Shoveller, 22, 80
Shrike, Loggerhead, 165, 221
Migrant, 165
Northern, 38, 165
White-rumped, 38
Sialia s. sialis, 76, 169, 216
Sitta canadensis, 75, 168, 216
c. carolinensis, 75, 168
Skinner, M. P., review of, 192
Slate-colored Junco, 36, 77, 164
Snakes, 220
Snow Bunting, 34
Snowy Egret, 81
Somateria mollisima borealis, 23
Sora. *See* Carolina Rail
South Dakota, 18-38, 72-76
Sparrow, Bachman's, 164
Chipping, 35, 164, 213
Clay-colored, 35, 175
English, 169, 173. *See* House Sparrow
Field, 35, 164
Fox, 36, 164
Grasshopper, 34, 163, 176
Harris's, 35
Henslow's, 34, 163, 175, 176
House, 213. *See* English Sparrow
Lark, 34
Leconte's, 34, 163, 207, 227
Lincoln's, 36, 164, 176
Mountain, 169
Savannah, 34, 163, 213
Song, 36, 164, 214
Swamp, 36, 164, 176
Tree, 34, 163, 213
Vesper, 34, 163, 213
White-crowned, 35, 163
White-throated, 35, 164, 216
Spatula clypeata, 22, 80
Speotyto cunicularia hypogaea, 29
Sphyrapicus v. varius, 30, 87, 212
Spinus pinus, 44, 163, 213
Spiza americana, 37, 164
Spizella m. monticola, 36, 164
pallida, 36
p. arenacea, 36
p. passerina, 36, 164, 213
p. pusilla, 36, 164
Spoonbill, 22
Squatarola squatarola, 44
Squatarola s. cynosurae, 27, 83
Starling, 174, 176
Steganopus tricolor, 25, 82, 201
Stelgidopteryx serripennis, 38, 165
Sterna antillarum, 20, 79
caspia imperator, 79
forsteri, 20, 79
hirundo, 79
Strix v. varia, 29, 86, 211
Sturnella m. magna, 32, 88, 213
neglecta, 32
Sturnus vulgaris, 174
Swallow, Bank, 38, 165
Barn, 37, 165, 207, 214
Cliff, 37, 165, 214
Rough-winged, 38, 165, 176
Tree, 38, 165, 214
Swan, Trumpeter, 81
Whistling, 24, 81

Tanager, Scarlet, 37, 164, 214
Summer, 92, 164, 173
Teal, Blue-winged, 21, 80, 206
Cinnamon, 21, 80
Green-winged, 21, 80
Telmatodytes p. iliacus, 75
p. palustris, 168, 216
Tennessee, 174
Tern, American Gull-billed, 79
Black, 20, 79
Caspian, 175, 226
Common, 79
Coues' Caspian, 79
Forster's, 20, 79
Least, 20, 79
Texas, 100
Thrush, Gray-cheeked, 76, 169
Hermit, 44, 76, 169, 220
Olive-backed, 76, 169
Willow, 76
Wood, 75, 169, 174, 216
Thryomanes b. bewicki, 92, 168

Thryothorus l. ludovicianus, 168
Totanus flavipes, 26, 82, 203, 210
melanoleucus, 26, 82, 203
Towhee, 36, 164
Arctic, 37
Toxostoma rufum, 74, 168, 216
Tringa s. solitaria, 82, 210. *See* Helodromas
Troglodytes aedon aedon, 92, 168, 216
a. parkmani, 75
Tryngites subruficollis, 27, 83
Turkey Vulture, 28, 85
Turnstone, Ruddy, 176
Tympanuchus a. americanus, 28
Tyrannus tyrannus, 30, 87, 212
verticallis, 31, 172, 173, 212
Tyto alba pratincola, 86

Van Tyne, Josselyn, review of, 110
Veery, 169, 176, 216
Vermivora bachmani, 41
c. celata, 73, 166
chrysoptera, 166
peregrina, 73, 166
pinus, 166
r. ruficapilla, 73, 166, 214
Vireo b. belli, 72, 165
Vireo, Bell's, 72, 165, 176
Blue-headed, 72, 165, 214
Philadelphia, 38, 165
Red-eyed, 38, 165, 174, 214
Warbling, 72, 165
White-eyed, 165
Yellow-throated, 72, 165, 176
Vireo g. griseus, 165
Vireosylva g. gilva, 72, 165
olivacea, 38, 165, 214
philadelphica, 38, 165
Virginia, 44, 74, 91, 94
Vulture, Black, 85
Turkey, 28, 44, 85

Warbler, Bachman's, 41
Bay-breasted, 167, 215
Blackburnian, 73, 167, 215
Black-throated Blue, 73, 166, 215
Black-poll, 73, 77, 167, 215
Black-throated Green, 167, 215
Black and White, 72, 166, 176, 214
Blue-winged, 166
Canada, 167, 215
Cape May, 166, 214
Cerulean, 166
Connecticut, 167
Chestnut-sided, 73, 167, 215
Golden-winged, 166, 176
Hooded, 167
Kentucky, 167
Magnolia, 73, 166, 215
Mourning, 74, 167, 215
Myrtle, 73, 77, 166, 215
Nashville, 73, 166, 214
Orange-crowned, 73, 166, 220
Palm, 167, 220
Parula, 166, 176
Pine, 167, 215
Prairie, 76, 176
Prothonotary, 166, 173, 225
Swainson's, 166
Sycamore, 167
Tennessee, 73, 166
Wilson's, 74, 167, 215
Worm-eating, 13, 166
Yellow, 73, 166, 174, 215, 222
Washington, 42
Water-Thrush, 167, 215
Grinnell's, 74, 167
Louisiana, 74, 167, 173
Water-Turkey, 79
Waxwing, Bohemian, 38
Cedar, 38, 91, 93, 165, 176, 214
Whip-poor-will, 44, 203-206
Wild Turkey, 83
Willet, 82, 176, 203
Western, 27
Wilsonia canadensis, 167, 215
citrina, 167
p. pusilla, 74, 167, 215
Wilson's Snipe, 25, 82, 201, 206, 210
Woodcock, 25, 82, 210
Wood Ibis, 81, 219
Woodpecker, Arctic Three-toed, 211
Downy, 30, 86, 173, 211
Hairy, 30, 86, 211
Ivory-billed, 86
Northern Hairy, 211
Northern Pileated, 212
Pileated, 87
Red-bellied, 87
Red-cockaded, 86
Red-headed, 30, 87, 173, 175
Southern Hairy, 86
Wood Pewee, 31, 87
Wren, Bewick's, 92, 168, 174
House, 92, 168, 216, 223
Long-billed, 168, 176, 207, 216
Prairie Marsh, 75, 207
Rock, 93
Short-billed, 75, 168
Western House, 75, 176
Winter, 75, 168, 216, 220

Xanthocephalus xanthocephalus, 32

Yellow-legs, Greater, 26, 82, 203, 206
Lesser, 26, 82, 203, 206

Zamelodia ludoviciana, 37. *See* Hedymeles
Zenaidura macroura carolinensis, 85, 210
m. marginella, 28
Zonotrichia albicollis, 35, 164, 213
l. leucophrys, 35, 163
querula, 35

TO OUR CONTRIBUTORS

Our members are urged to submit articles for publication in the BULLETIN. Short items are desired for the department of General Notes, as well as longer contributions, especially pertaining to life-history, migration, ecology, behavior, song, economic ornithology, field equipment and methods, etc. Local faunal lists are also desired, but they should be annotated, at least briefly, and should be based upon sufficient study to be reasonably complete. Authors are asked to include the common name, the scientific name (from the A. O. U. check-list), and annotations, and they should be arranged in this order. The annotations should include explicit data concerning unusual species. Omit serial numbering.

THE MANUSCRIPT. The manuscript, or copy, should be prepared with due regard for literary style, correct spelling and punctuation. Use sheets of paper of good quality and of letter size (8½x11 inches); write on one side only, and leave wide margins; if at all possible manuscript should be prepared with a typewriter, using double spacing and a reasonably fresh, black ribbon.

The title should be carefully constructed so as to indicate most clearly the nature of the subject matter of the contribution. Where the paper deals with a single species it is desirable to include in the title both the common and the scientific names, or, to include the scientific name in the introductory paragraph. Contributors are requested to mark at the top of the first page of the manuscript the number of words contained. This will save the editor's time and will be appreciated.

Manuscripts intended for publication in any particular issue should be in the hands of the editor thirty days prior to the date of publication.

ILLUSTRATIONS. To reproduce well prints should have good contrast with detail. In sending prints the author should attach to each one an adequate description or legend.

BIBLIOGRAPHY. The scientific value of some contributions is enhanced by an accompanying list of works cited. Such citations should be complete, giving author's name, full title of the paper, both the year and volume of the periodical, and pages, first and last.

PROOF. Galley proof will be regularly submitted to authors. Page proofs will be submitted only on request. Proof of notes and short articles will not be submitted unless requested. All proofs must be returned within four days. Expensive changes in copy after the type has been set must be charged to the author.

SEPARATES. The Club is unable, under present financial conditions, to furnish reprints to authors gratis. Arrangements will be made, however, for such reprints to be obtained at practically cost. The cost will vary somewhat with the nature of the composition, but will depend mainly upon the number of pages. A scale of rates is appended which will serve as a guide to the approximate printer's costs.

If a blank page is left in the folding this may be used for a title page, which will be set and printed at the rate indicated. If a complete cover with printed title page is desired it may be obtained at the rate shown in the last column. All orders for separates must accompany the returned galley proof upon blanks provided. Orders cannot be taken after the forms have been taken down.

Copies	2	4	6	8	12	16	20	24	28	32	36	40	Cover
50	$1.25	$2.00	$2.75	$3.50	$4.75	$6.00	$7.75	$8.50	$9.75	$11.00	$12.25	$13.50	$2.75
100	1.50	2.25	3.00	3.75	5.00	6.25	7.50	8.75	10.00	11.25	12.50	13.75	2.50
200	2.00	2.75	3.50	4.25	5.50	6.75	8.00	9.25	10.50	11.75	13.00	14.25	3.00
300	2.75	3.50	4.25	5.00	6.25	7.50	8.75	10.00	11.25	12.50	13.75	15.00	4.00
400	3.25	4.00	4.75	5.50	6.75	8.00	9.25	10.50	11.75	13.00	14.25	15.50	5.00
500	3.75	4.50	5.25	6.00	7.25	8.50	9.75	11.00	12.25	13.50	14.75	16.00	6.00

Repaging—25c per page extra.
Title Page—1.25.

DUES FOR 1926

ANNUAL DUES FOR 1926 NOW PAYABLE

This is the Treasurer's first notice to all members that dues for 1926 are now payable to the Treasurer,

Mr. Ben J. Blincoe,
R. F. D. No. 13 Dayton, Ohio.

You are earnestly requested to remit at your earliest convenience, thus saving postage expense to the Club, and much time and effort to the Treasurer. A receipt will be returned only if requested.

Sustaining Members	**$5.00**
Active Members	**$2.50**
Associate Members	**$1.50**

The Club values the continued support of every member, and every resignation is received with much regret. It is a very unpleasant duty to discontinue the BULLETIN to members in arrears for dues.

The Wilson Ornithological Club is enjoying a healthy growth, but it must be regarded as still in the growing stage. There is still a certain individual responsibility which each of us may assume in assisting the Club in this development. In its growth very much depends upon the number of paying members—not everything, of course, but a great deal. With a larger membership we can publish a bigger, and perhaps better, magazine. With a better magazine we may be able to attract more members. Not only that, but we wish to serve, and to have the co-operation of, every student and lover of birds within our reach. With just a minimum of effort on the part of those who are now members we could greatly increase our membership for the coming year, and all of us would enjoy the resulting prosperity. We therefore invite those who believe in our society to assist in bringing in all who might enjoy our fellowship and the privileges of membership.

One may himself choose the grade of membership one desires to enter. We invite all to become Sustaining or Active Members, and we welcome all to Associate Membership. The support which you give to the organization is, in a sense, the measure of your interest in it, and its work.